

MV700A

400MHz FSB / VGA / DVI / LVDS

TV-OUT / LAN / SPDIF

400MHz FSB . All-in-one

Sound . LAN . Twin View . Touch screen .

SATA . ATA 66/100/133 . USB . IrDA . CF

Audio Amplifier . DIO/WDT . 12V DC-IN

NO. MV700A
Release date: APR . 4 . 2007

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MV700A

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User Manual edition 0.1, APR . 4 . 2007

Warning !

1. CF card & 2.5" HDD first boot issue

Due to the frequent update and change of Compact Flash card, it can't always work with 2.5" HDD at the same time. Users may try and get the test result.

2. Battery

Battery on board is consumables. Lex doesn't guarantee the life time of it.

3. Fanless solution with HDD

Please be aware of specification & limitation for HDD when fanless solution is implemented.

4. Lex will not give further notification if there is any change about the product information and the manual.

5. SATA does not support Hot SWAP

6. There would be $\pm 20\%$ difference of WDT at room temperature.

* Hardware Notice Guide

1. Before installing the power supply with this motherboard, please attach the 12V/DC (4 pin connector) of the adapter to motherboard first.
After that, plug the adapter power to AC outlet.
Always normally shut down the computer before you move the system unit or remove the power supply from the motherboard.
Please unplug the 12V/DC (4 pin connector) of the adapter from motherboard first.
Then unplug the adapter from the AC outlet.
Please refer to procedure from the photo 1
2. There will be high possibility to burn out the CPU if you change/ modify any parts of the CPU cooler.
3. Please wear wrist strap and attach it to a metal part of the system unit before handling a component.
You can also touch an object that is of ground connection or with metal surface if you don't have wrist strap.
4. Please be careful when you handle this product. Pay attention to & don't touch the sharp-pointed components at the bottom PCB .
5. Please pay attention to this: Remove or change any components from the motherboard will VOID the warranty of the motherboard you purchased .
6. Before you install/remove any components or make any jumper setting on the motherboard, please make sure to disconnect the power first.
(Please follow the instructions as of this guide)
7. Please only use single sided Mini PCI card, do not use the double sided Mini PCI card which is not suitable.
8. This does not support 16 bit mini PCI card
9. Please follow this instruction carefully when using the "POWERON after PWR-Fair" function.
When the DC power adaptor runs out of power, unplug it from the DC current;
when power returns plug it back in only after 5 seconds. If there is a power outage, unplug it from the AC current, when power returns plug it back in only after 30 seconds.
Otherwise it will cause system locking or serious damage.

Remark 1:

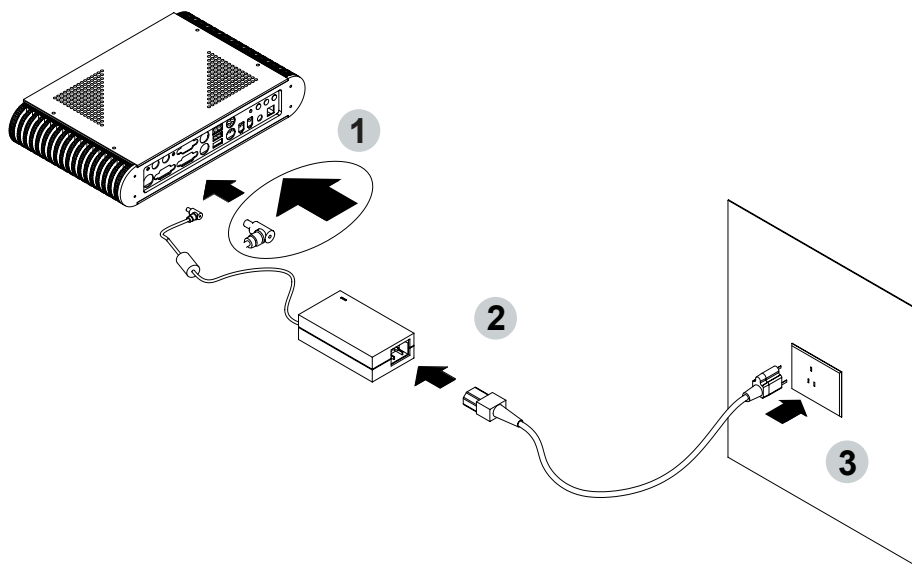
Always insert/unplug the 12V/DC (4 pin connector) horizontally & directly from the motherboard.

DO NOT twist the 12V/DC (4 pin connector) gently, it is designed to fit snugly .

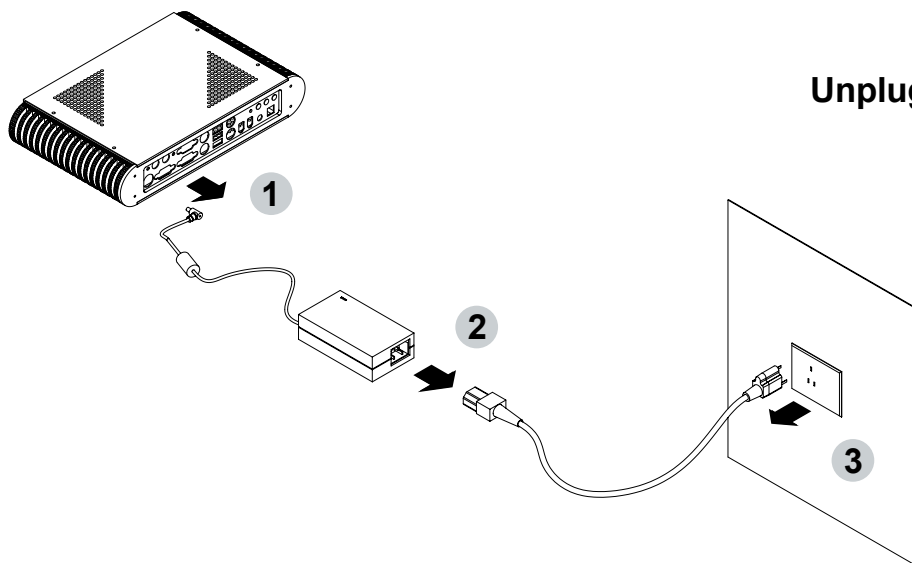
Moreover, erratic pull / push testing with the DC Jack might cause the unpredictable damage to the component & system unit.

Photo 1

Insert



Unplug



Chapter-1

General Information

The MV700A is a Light form factor All-In-One control Board. The board design combines all necessary input and output effects interfaces, which makes itself an ideal all-in-one control board for Multimedia Application. The board is designed with 400 MHz internal bus clock rate architecture.

The MV700A All-In-One motherboard uses VIA CX700M single chip, built-in VIA Eden(V4) / C7(V4) Nano BGA2 CPU, VGA and Audio feature onboard and supports Twin view function. The board is designed with HD Audio specification 1.0 which provides an ideal sound adapter in any audio application. This board offers the superb performance and PC specification in the industry.

The motherboard is fully compatible with industry standards, adding many technical enhancements, and is fully compatible with thousands of software applications developed for IBM PC/AT compatible computers. The control logic provides high-speed performance for the most advanced multi-user, multitasking applications available today.

With DMA33/66/100 and SATA-300 access of mode 4 to IDE drive interface architecture, the IDE interface supports maximum 100 MB/sec (IDE) and 150 MB/sec and 300MB/s(SATA) data transfer rate to 2 pieces of IDE drive connection and 2 pieces of SATA Drives connection. Compact Flash Reader supports IDE/ ATA interface.

A single Flash chip holds the system BIOS, and you can change the Flash BIOS by the Utility Update. Advanced IR port also provides a faster data transmission.

MV700A is designed with CX700M integrated graphic VGA controller which provides connection to VGA Monitor and HDTV. LVDS/DVI transmitter is integrated to support panel resolutions up to 1600x1200. The MV700A Board supports DDR2 RAM memory with one unbuffered double-sided DIMMs up to 1GB. PCI gold finger and MINI PCI are available for expansion purpose.

1-1 Major Feature

1. VIA Eden (V4) nano BGA2 500MHz CPU/ VIA C7 nano BGA2 1GHz CPU
2. VIA CX700M chip
3. One DDR2 400/533 DRAM unbuffered double-sided DIMMs up to 1GB
4. One channel master mode PCI support two IDE devices DMA 33/66/100 controller
2 Channels SATA Connector
5. 400 MHz system clock support
6. Versatile storage device:
 - * One 50-pin Compact Flash socket
 - * One 40-pin DOM
 - * One 2.5" HDD
 - * Two SATA HDD
7. On board CX700M graphic controller integrated graphics
8. On board LAN option*:
 - * MV700A-1R ----1 x Realtek 8100C 10/100 Mb
 - * MV700A-1G ----1 x Realtek 8110SC 10/100/1000 Mb
 - * MV700A-1U ----1 x Intel 82541PI 10/100/1000 Mb
9. Compact Flash Reader Type I/II for IDE/ATA interface
10. One Video-Input
11. One serial RS232 Port.
12. On board Sound, HD Audio 2 channel
13. SPDIF-out support
14. On board mini PS/2 Keyboard/Mouse connector
15. DC 12V-IN Power Adapter support
16. 18/24bits single channel LVDS support with a single-channel DVI panel or
36/48 bits dual channels LVDS panel support (Option)
17. Hardware watch dog timer (Option)
18. Hardware digital input & output(Option)
19. On board touch screen controller(Option)
20. Audio Amplifier support(Option)
21. PCI & MINI PCI support

*The models mentioned above are standard models currently.

1-1 Major Feature

1. VIA Eden (V4) nano BGA2 500MHz CPU/ VIA C7 nano BGA2 1GHz CPU
2. VIA CX700M chip
3. One DDR2 400/533 DRAM unbuffered double-sided DIMMs up to 1GB
4. One channel master mode PCI support two IDE devices DMA 33/66/100 controller
2 Channels SATA Connector
5. 400 MHz system clock support
6. Versatile storage device:
 - * One 50-pin Compact Flash socket
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17. Hardware watch dog timer (Option)
18. Hardware digital input & output(Option)
19. On board touch screen controller(Option)
20. Audio Amplifier support(Option)
21. PCI & MINI PCI support

*The models mentioned above are standard models currently.

1-2 Specification

1. CPU: VIA Eden (V4) nano BGA2 500 MHZ CPU / VIA C7 (V4) nano BGA2 1GHz CPU
2. Cache Memory: Integrated full-speed 128KB L1/L2 cache
3. Chipset: VIA CX700M
4. Memory: One DIMM socket up to 1GB DDR2 400/533 SDRAM
5. VGA: CX700M integrated graphic controller; support 128-bit 2D/3D display up to 1600 x 1200, memory sharable up to 128MB
6. I/O Chipset: VIA VT1211 IO
7. IDE: Two IDE disk drives; support DMA33/66/100 transfer rate up to 33/66/100 MB/sec
SATA : 2 SATA disk drives ; support SATA150 MB/sec and 300 MB/sec
8. LAN: * MV700A-1R ---- 1 x Realtek 8100C 10/100 Mb
 * MV700A-1G ---- 1 x Realtek 8110SC 10/100/1000 Mb
 * MV700A-1U ---- 1 x Intel 82541 PI10/100/1000 Mb
9. Storage devices: * One 50-pin Compact Flash socket
 * One 40-pin DOM
 * One 2.5" HDD
 * Two SATA HDD
10. Serial Port: One serial port
11. CRT/HDTV: Supports CRT resolution up to 1920 x 1080, TV resolution up to 1920 x 1080i, integrated with HDTV encoder, compliant with NTSC or PAL TV.
12. LVDS/DVI: Support 18/24 bits single-channel panel and one single-channel DVI panel or one 36/48 bits dual-channel panel (Option)
13. WDT: Hardware watch dog timer, 0-255 second programmable (Option)
14. DI/DO: Hardware Digital input/output support, 8x DI/8x DO (Option)
15. Touch screen: C8051F321 USB interface touch screen controller on board, support 4-, 5-, 8-wire Analog resistive touch screen (Option)
16. Audio Amplifier: 6-W/CH into an 8Ω load from a 12V supply (Option)
17. IR: One IrDA TX/RX header
18. USB: Support Five USB ports
19. Video-In: One port with Conexant Fusion 878A video Codec
20. Keyboard/Mouse: PS/2 6-pin Mini Din
21. Sound: HD Audio 2 channel Sound, full-duplex
22. BIOS: Award BIOS version 6.1
23. Form Factor: LIGHT Board, 200x150mm
24. Power: 12V DC-IN power input
25. Power Voltage: +12V (11.4V to 12.6V)
26. Power Consumption: Please refer to page 80
27. Expansion: 1 x MINI PCI socket for only PCI rev. 2.2 interface
 1 x PCI gold finger for only PCI rev. 2.2 interface

1-3 Installing the Mini PCI card

1. Align the Mini PCI card with the connector at a 45 degree angle.



2. Press the Mini PCI into the connector until you hear a click.



Notices:

1. The connectors are designed to ensure the correct insertion. If you feel resistance, check the connectors & golden finger direction, and realign the card.



2. Make sure the retaining clips (on two sides of the slot) lock onto the notches of the card firmly.

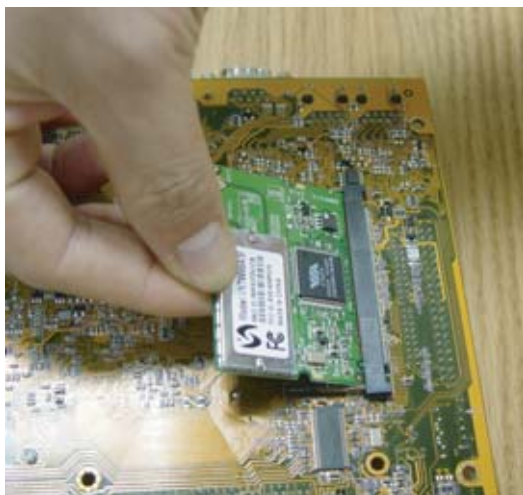


1-3-1 Removing the Mini PCI card

1. Release the Mini PCI card by pulling outward the two retaining clips and the card pops up slightly.



2. Lift the mini PCI card out of its connector carefully.

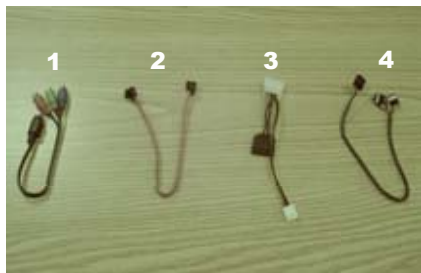


1-4 Packing List*



- ① MV700A Board
- ② DC 12V Power Adapter (4P)
- ③ One ATA 100 Flat Cable
- ④ IDE Cable 44P
- ⑤ Power Cable
- ⑥ S-Video Cable
- ⑦ Utility CD Disk
- ⑧ User's Manual

. MV700A Packing (option)



- ① HDTV Cable
- ② SATA Data Cable
- ③ SATA Power Cable
- ④ Audio Cable (Line out & Mic in)

*The packing list above is for the users who purchase single motherboard. The users who purchase the board with chassis may refer to the packing list in the Assembly Guide.

Please contact with your dealer if any of these items is missing or damaged on delivery. And please keep all parts of the package with packing materials in case if you need to deliver or store the product in the future.

Chapter-2

Hardware Installation

This chapter provides the information how to install the hardware of MV700A. Please follow section 1-4, 2-1 and 2-2 to check the delivery package and unpack carefully. Please follow the jumper setting procedure.

2-1 Unpacking Precaution

The MV700A board has been well packed with an anti-static bag to protect its sensitive components and circuitry from damage due to static electric discharge.

NOTE!

1. Do not touch the board or any other sensitive components without all necessary anti-static protection.
2. Please pay attention to the voltage limitation of DC-IN12 V \pm 5 %.
Overuse of DC-IN voltage limitation or change to another power adapter (not provided with this system) will VOID warranty.

You should follow these steps to protect the board from the static electric discharge whenever you handle the board:

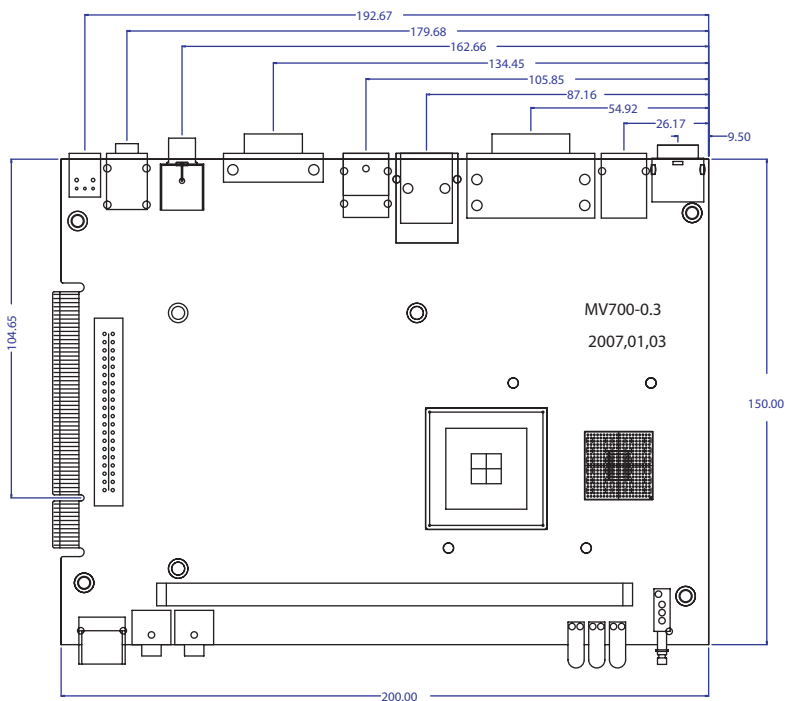
1. Ground yourself by a grounded wrist strap at all times when you handle the MV700A.
Well secure the ALLIGATOR clip of the strap to the end of the shielded wire lead from a grounded object. Please put on and connect the strap before handling the MV700A for harmlessly discharge any static electricity through the strap.
2. Please use anti-static pad to put any components, parts, or tools on the pad whenever you work on them outside the computer. You may also use the anti-static bag instead of the pad. Please ask your local supplier for necessary parts on anti-static requirement.
3. Do not plug any connector or set any jumper when the power is on.

2-2 Unpacking checkup

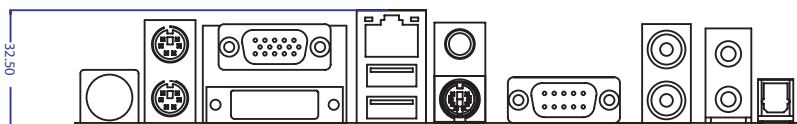
First of all, please follow all necessary steps of section 2.1 to protect MV700A from electricity discharge. With reference to section 1.3, please check the delivery package again with following steps:

1. Unpack the MV700A board and keep all packing material, manual and driver disc etc, do not dispose !
2. Is there any components lose or drops from the board? DO NOT CONTINUE TO INSTALL THIS BOARD!CONTACT THE DEALER YOU PURCHASED THIS BOARD FROM, IMMEDIATELY.
3. Is there any visible damage on the board? DO NOT CONTINUE TO INSTALL THIS BOARD!CONTACT THE DEALER YOU PURCHASED THIS BOARD FROM, IMMEDIATELY.
4. Check your optional parts (i.e. DDR2, CF etc.), all necessary jumpers setting to jumper pin-set, and CMOS setup correctly.
Please also refer to all information of jumper settings in this manual.
5. Check your external devices (i.e. Add-On-Card, Driver Type etc.) for complete add-in or connection and CMOS setup correctly.
Please also refer to all information of connector connection in this manual.
6. Please keep all necessary manual and driver disc in a good condition for future re-installation if you change your Operating System.

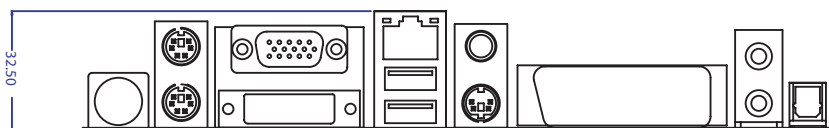
2-3 Dimension 200x150(mm)



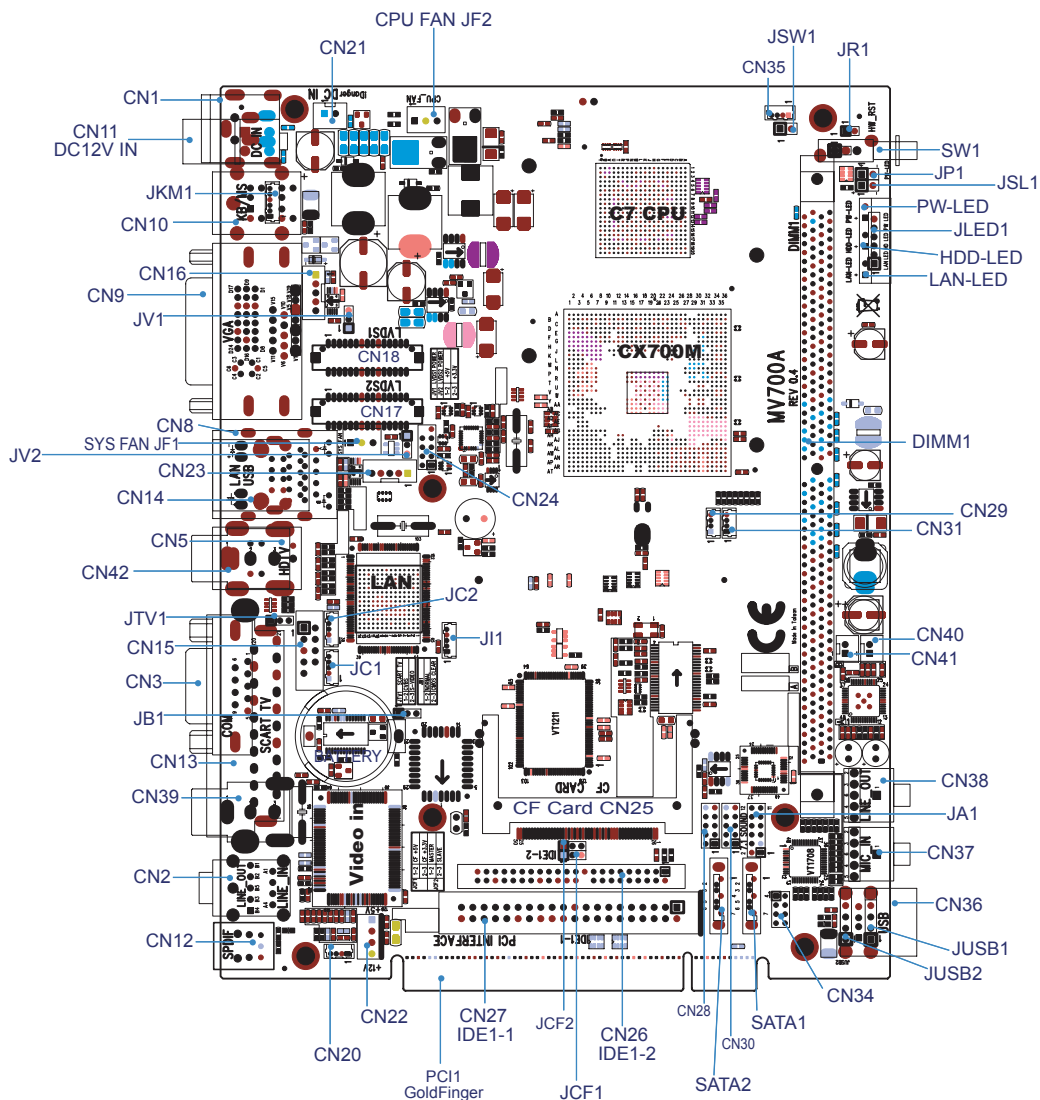
. Back Panel (MV700A)



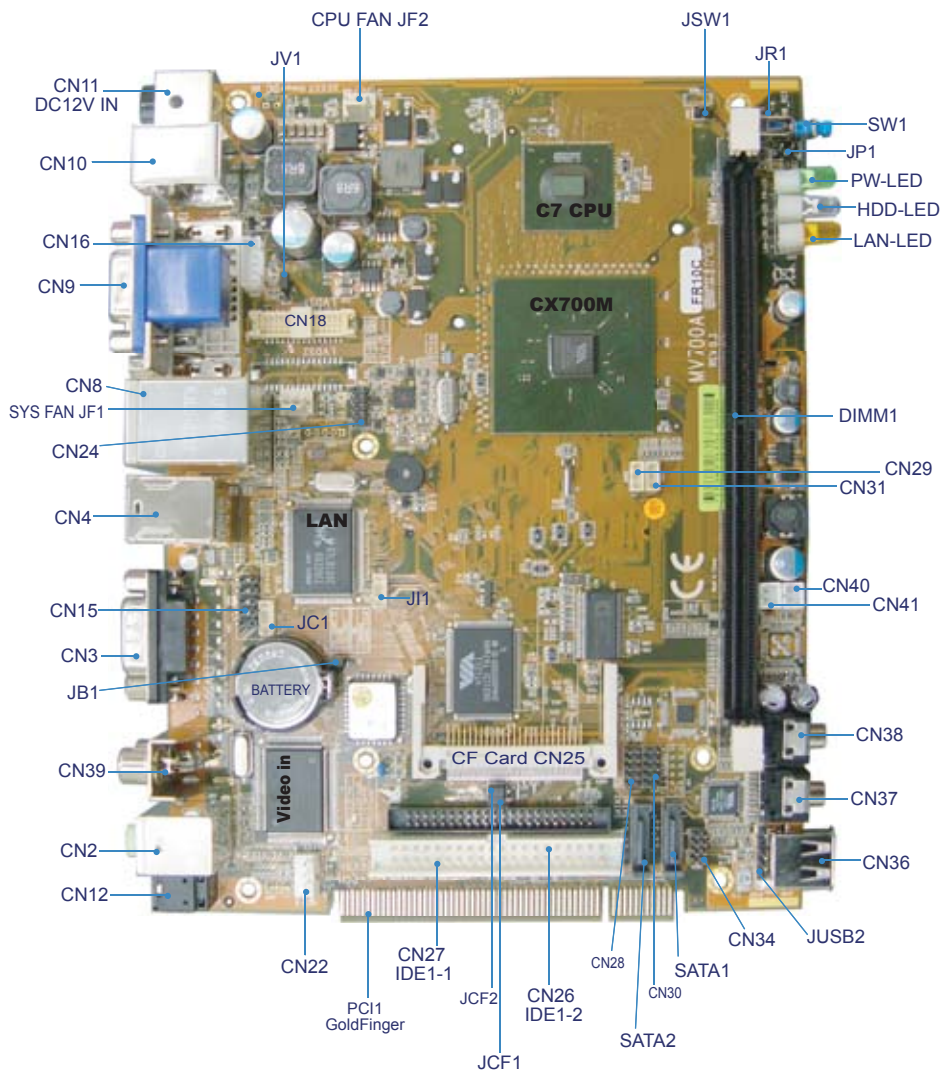
. Back Panel (MV700A-SCART TV)



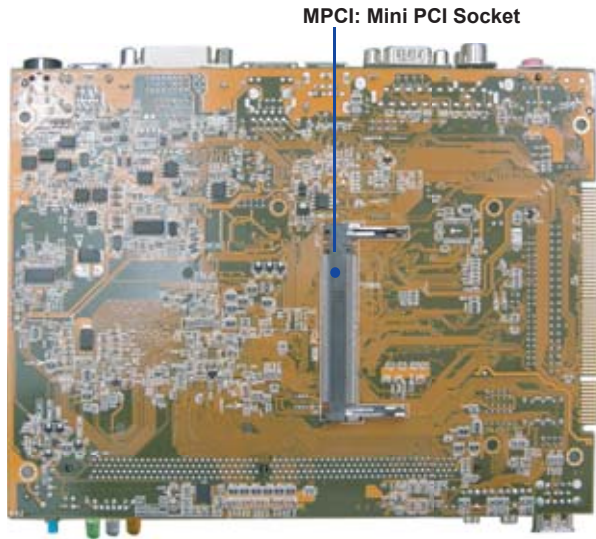
2-4 Layout



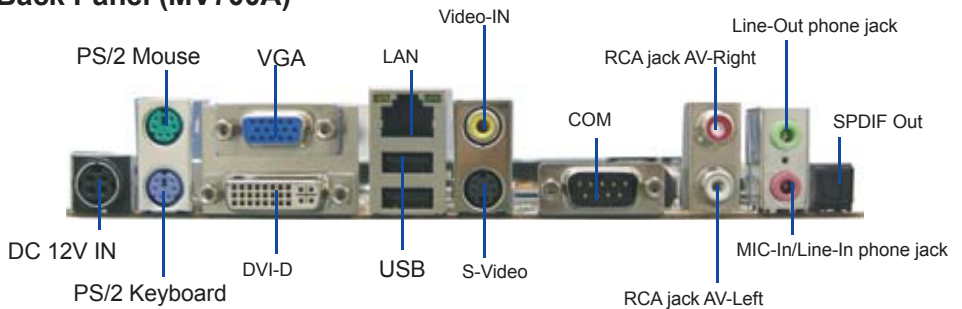
2-5 Diagram



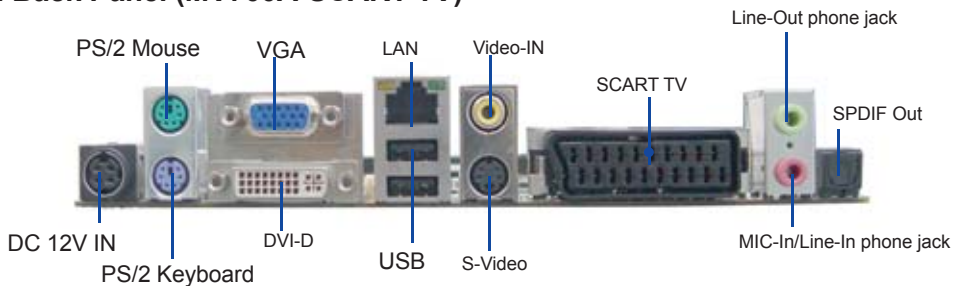
2-5-1 Bottom Side Diagram



. Back Panel (MV700A)



. Back Panel (MV700A-SCART TV)



2-6 Install Memory

This motherboard provides one 240-pin DUAL INLINE MEMORY MODULES (DIMM) socket for memory expansion available from minimum memory size of 256MB to maximum memory size of 1GB DDR2 RAM.

DDR2 clock supports: DDR2400, DDR2533

Valid Memory Configurations

DIMM1	System Accept or Not	Total Memory
		Min. ~ Max.
DS/SS	Accept	256MB~1GB

DS: Double Sided DIMM

SS: Single Sided DIMM

NOTE!

Make sure the total installed memory does not exceed 1GB;
otherwise, the system may hang during startup.

Install DDR RAM module oriented as Fig. 2.1.

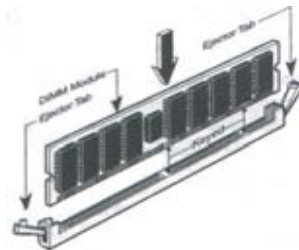
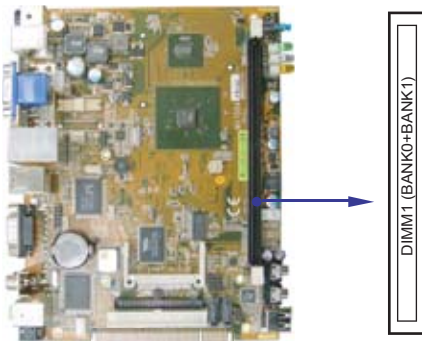


Figure 2.1

NOTE!

When you install DIMM module fully into the DIMM socket, the eject tab should be locked into the DIMM module very firmly and fit into its indentation on both sides.

WARNING!

2. Once you hear " Beep Beep Beep" sounds after turning on the power , please check if the DRAM is installed properly or not.

2-7 List of Jumpers

JB1: CMOS DATA SET

JCF1: CF card Power +5V/+3.3V select

JCF2: CF card Master and Slave select

JV1: LVDS1 power select

JV2: LVDS2 power select

JTV1: SCART TV CVBS/S-Video output select

2-8 Jumper Setting Description

A jumper is ON as a closed circuit with a plastic cap covering two pins. A jumper is OFF as an open circuit without the plastic cap. Some jumpers have three pins, labeled 1, 2, and 3.

You could connect either pin 1 and 2 or 2 and 3.

The below figure 2.2 shows the examples of different jumper settings in this manual.

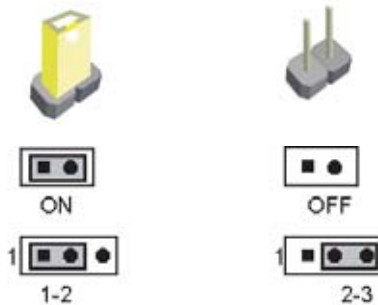


Figure 2.2

All jumpers already have its default setting with the plastic cap inserted as ON, or without the plastic cap as OFF. The default setting may be referred in this manual with a " * " symbol .

2-9 CMOS Data Set

A battery must be used to retain the motherboard configuration in CMOS RAM. Close pin 1 and pin 2 of JB1 to store the CMOS data.

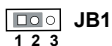
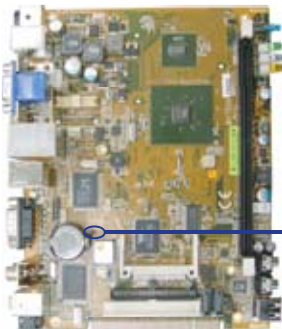
To clear the CMOS, follow the procedures below:

1. Turn off the system and unplug the AC power
2. Remove DC 12V power cable from DC 12V power connector
3. Locate JB1 and close pin 2-3 for a few seconds
4. Return to its normal setting by shorting pin 1-2
5. Connect DC 12V power cable back to DC 12V power connector

Note: Do not clear CMOS unless

- 1. Troubleshooting**
- 2. Forget password**
- 3. You fail over-clocking system**

JB1	Description
*1-2	*Normal Set
2-3	CMOS Data clear



***Normal**



Clear Setting

2-10 JCF1 CF Card Power Voltage select

If you use CF card and HDD together, we suggest you use the jumper setup for +5V.

JCF1	Description
*1-2	*For CF CARD power voltage select +5V
2-3	For CF CARD power voltage select +3.3V



JCF1



+5V*



3.3V

* We use □ to refer to as pin1

2-11 JCF2 CF Card Master and Slave selection

If you use CF card and HDD together, please set CF as Master and HDD as Slave.

JCF2	Description
*1-2	*CF Card use Master type
2-3	CF Card use Slave type



JCF2



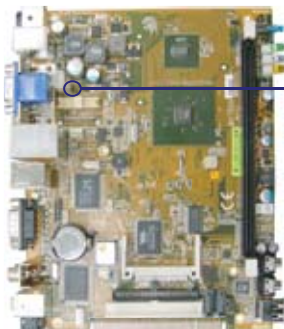
Master*



Slave

2-12 JV1: LVDS1 panel power select

JV1	Description
1-2	+5V
*2-3	+3.3V



JV1



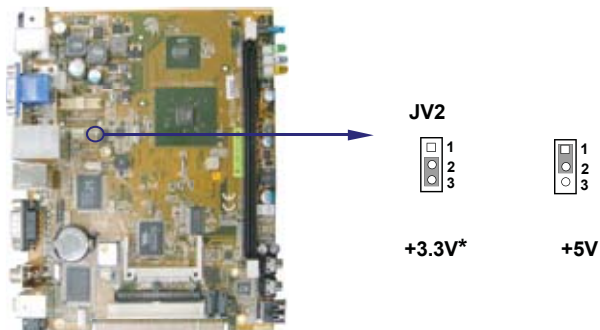
+3.3V*



+5V

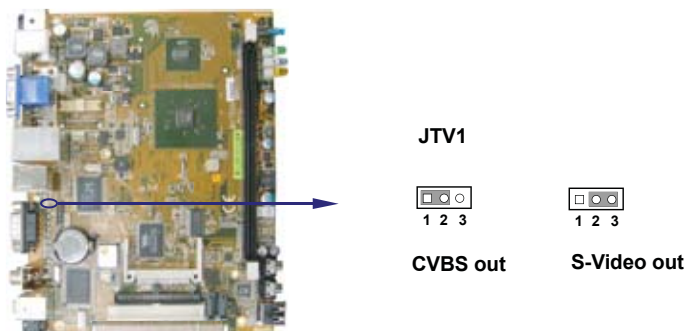
2-13 JV2: LVDS2 panel power select

JV2	Description
1-2	+5V
*2-3	+3.3V



2-14 JTV1: SCART TV CVBS/S-Video output select

JTV1	Description
1-2	CVBS out
2-3	S-Video out



Chapter-3

Connection

This chapter provides all necessary information of the peripheral's connections, switches and indicators. Always power off the board before you install the peripherals.

3-1 List of Connectors

CN1: DC 12V-IN DIN Connector

CN11: DC 12V-IN Connector (Share with CN1)

CN10: PS2 Keyboard /Mouse Connector

JKM1: PS2 Keyboard /Mouse Internal Connector (Share with CN10)

CN8: USB port 4/5 and LAN RJ45 Connector (or single RJ45)

CN9: VGA (Up side) port DB15 Connector

CN9: DVI (Down side) port DB29 Connector

CN13: SCART TV connector

CN3: COM1 port DB9pin 5.08mm Connector (Share with CN13)

CN15: COM1 port 2.54mm Header

JC1/JC2: COM1/COM2 for Touch pad header

CN27: IDE1 40 pin (2.54mm) Connector

CN26: IDE2 44 pin (2.0mm) Connector

CN25: CF 50 pin socket

SATA1: S-ATA1 IDE 7pin Wafer

SATA2: S-ATA2 IDE 7pin Wafer

CN29: USB port 2 connector

CN31: USB port 3 connector

CN36: USB port 4 connector (Single port)

JUSB1/JUSB2: USB 0/1 port connector

CN28/CN30: WDT/DIO connector

CN18: LVDS1 connector

CN16: LVDS1 Inverter power connector

CN17: LVDS2 connector

CN23: LVDS2 Inverter power connector

CN20: Video In / Audio In connector

CN38: Line-out connector

CN37: MIC-IN connector

CN2: MIC-IN/Line-IN/OUT connector

CN39: Line-OUT Right/Left RCA connector (Share with CN13)

List of Connectors

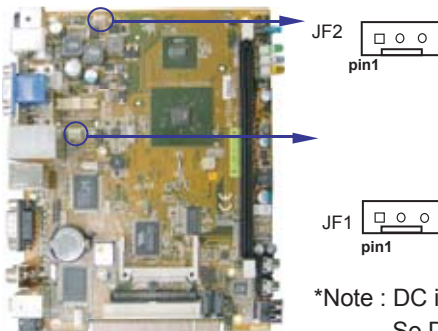
CN12: SPDIF OUT connector
CN34: Line-OUT /Lin-In /MIC-IN Header
CN41: Amplifier Line-out Right Channel connector
CN40: Amplifier Line-out Left Channel connector
JF1: System FAN connector
JF2: CPU FAN connector
JI1: IR connector
CN22: DC +5/+12V output connector
CN35: I2C Bus connector
CN5: S-Video (Down side) TV out connector
CN5: RCA (Up side) Video In connector
CN42: RCA (Down side) TV Out connector (Share with CN5)
CN42: RCA (Up side) Video In connector (Share with CN5)
CN24: Pan Mount Touch panel connector
MPC11: Mini PCI socket
JR1: Reset pin
SW1: System power switch
JSW1: System power switch pin header
PW LED: System power LED or pin header
HD LED: Hard Disk LED or pin header
LAN LED: LAN active LED
JP1: System power LED pin header

3-2 FAN Connector

MV700A provides one CPU fan connector and one system fan connector.

CPU Fan Connector- JF2

System FAN Connector-JF1



PIN NO.	Description
1	FAN GND
2	+12V
3	FAN speed Sensor

*Note : DC in +12V by switch to FAN power +12V
So DC in need stable +12V input

3-3 IDE Connectors

There are two kinds of IDE connectors on this board, 40-pin and 44-pin. Each can support up to two IDE-interface devices. One standard 40-pin header daisy-chain driver connector provides as IDE1 with following pin assignment.

40 pins (2.54mm)-CN27(IDE 1-1)

This connector supports the provided IDE hard disk ribbon cable. After connecting the single plug end to motherboard, connect the two plugs at other end to your hard disk(s). If you install two hard disks, you must configure the second drive as Slave mode by setting its jumpers accordingly. Please refer to the documentation of your hard disk for the jumper settings.

Note!

PIN 20 connector +5V of IDE 1 could provide the power of DOM

PIN NO.	Description	PIN NO.	Description
1	RESET#	2	GND
3	DATA7	4	DATA8
5	DATA6	6	DATA9
7	DATA5	8	DATA10
9	DATA4	10	DATA11
11	DATA3	12	DATA12
13	DATA2	14	DATA13
15	DATA1	16	DATA14
17	DATA0	18	DATA15
19	GND	20	+5V
21	DREQ	22	GND
23	IOW#	24	GND
25	IOR#	26	GND
27	IORDY	28	PULL DOWN
29	DACK#	30	GND
31	IRQ15	32	NC
33	SA 1	34	ATA 33/66/100 CABLE SELECT
35	SA 0	36	SA 2
37	HD CS0#	38	HD CS1#
39	HD LED	40	GROUND

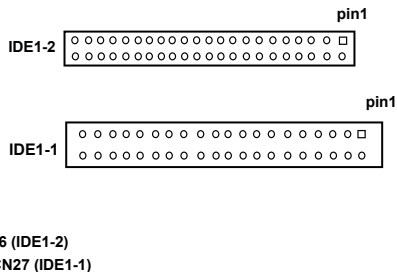
Note: Refer JCF1/JCF2 Jumper set (CF socket share to IDE)

44 pins(2.0mm)-CN26 (IDE1-2)

This connector supports slim type 2.5" HDD. Follow the same procedure described for the primary IDE connector. You may also configure two hard disks as both Masters using one ribbon cable on the primary IDE connector and another ribbon cable on the secondary IDE connector.

PIN NO.	Description	PIN NO.	Description
1	RESET#	2	GND
3	DATA7	4	DATA8
5	DATA6	6	DATA9
7	DATA5	8	DATA10
9	DATA4	10	DATA11
11	DATA3	12	DATA12
13	DATA2	14	DATA13
15	DATA1	16	DATA14
17	DATA0	18	DATA15
19	GND	20	KEY
21	DREQ	22	GND
23	IOW#	24	GND
25	IOR#	26	GND
27	IORDY	28	PULL DOWN
29	DACK#	30	GND
31	IRQ15	32	NC
33	SA 1	34	ATA 33/66/100 CABLE SELECT
35	SA 0	36	SA 2
37	HD CS0#	38	HD CS1#
39	HD LED	40	GND
41	+5V	42	+5V
43	GND	44	NC

Note: Refer JCF1/JCF2 Jumper set (CF socket share to IDE)



3-4 Compact - Flash Memory Socket

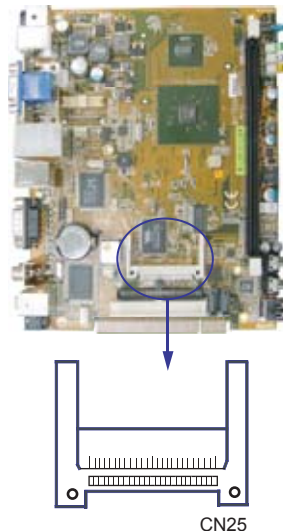
MV700A configures CompactFlash Storage Card in IDE mode.

It will use IDE channel when CompactFlash card is plugged in.

This socket supports CF Card Type I/II socket spec.

CF Socket 50pin---CN25

PIN NO.	Description	PIN NO.	Description
1	GND	26	GND(-CD1)
2	DATA3	27	DATA11
3	DATA4	28	DATA12
4	DATA5	29	DATA13
5	DATA6	30	DATA14
6	DATA7	31	DATA15
7	-CS0	32	-CS1
8	GND(A10)	33	GND(-VS1)
9	GND(-ATA_ SEL)	34	-IOR
10	GND(A9)	35	-IOW
11	GND(A8)	36	-WE(PH)
12	GND(A7)	37	INTR
13	+5V or +3.3V	38	+5V or +3.3V
14	GND(A6)	39	-CSEL
15	GND(A5)	40	NC(-VS2)
16	GND(A4)	41	RESET
17	GND(A3)	42	IORDY
18	SDA2	43	DMAREG(-INPACK)
19	SDA1	44	DMAACK[-REG(PH)]
20	SDA0	45	-DASP
21	DATA0	46	-PDIAG
22	DATA1	47	DATA8
23	DATA2	48	DATA9
24	NC(-IOCS16)	49	DATA10
25	GND(-CD2)	50	GND



Note:

1. CN27(IDE1-1), CN26(IDE1-2), and CN25(CF Card) "CAN NOT" plug three Devices at the same time, MV700A supports two IDE devices ONLY.
2. CN26 IDE1-2 44 pin connector -- can only plug with cable or CN012.
3. CN27 IDE1-1 40 pin connector— Device can only use slave mode with ATA66/100 cable.
4. Due to the frequent update and change of Compact Flash Card, it can't always work with HDD at the same time.

The suggest combination, please see below table:

	Combination 1 *	Combination 2	Combination 3	Combination 4
IDE1-1 40 pin	X	Slave	Master/Slave	X
IDE1-2 44 pin (With cable or CN012)	Master/Slave	Master (CN012)	X	Master & Slave
CF card	Slave/Master	X	X	X

X = Not Connected

* = Please see note 4

3-5 Serial Port Connector

CN3 : RS232 Mode COM port connector D-SUB 9PIN (508) (share with CN13)

PIN NO.	Description	PIN NO.	Description
1	DCD	6	DSR
2	RXD	7	RTS
3	TXD	8	CTS
4	DTR	9	RI
5	GND		

CN15: COM1 port Header (2*5 pin Header 2.54mm)

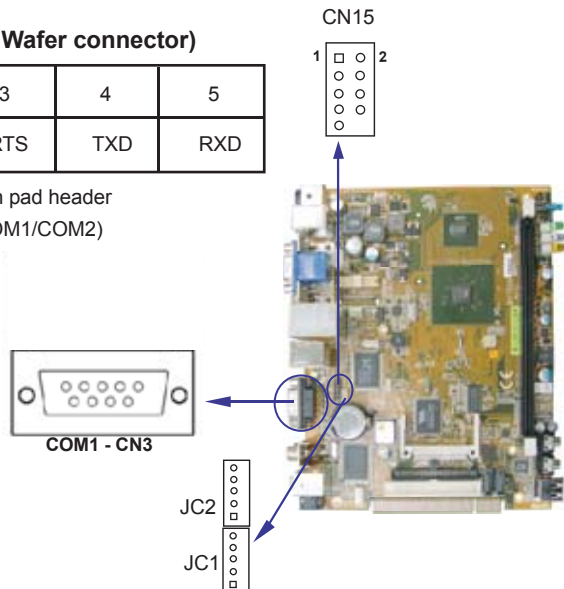
PIN NO.	Description	PIN NO.	Description
1	DCD	2	RXD
3	TXD	4	DTR
5	GND	6	DSR
7	RTS	8	CTS
9	RI	10	KEY

● **JC1/JC2(option): 5pin (1.25mm Wafer connector)**

PIN NO.	1	2	3	4	5
Description	+5V	GND	RTS	TXD	RXD

JC1/JC2: COM1/COM2(option) for Touch pad header

All Signals are RS232 level (Share to COM1/COM2)



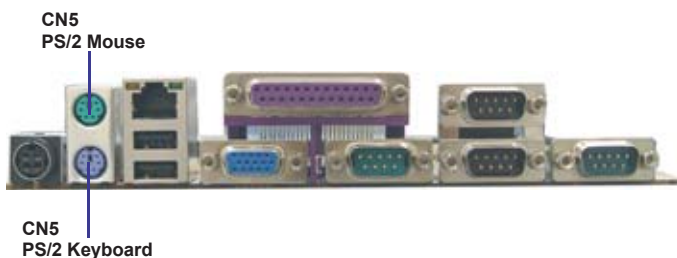
3-6 Keyboard and Mouse Connector

CN10A: PS2 Keyboard down side (Din 6 pin jack)

PIN NO.	Description
1	KB DATA
2	MS DATA
3	GND
4	+5V
5	KB CLOCK
6	MS CLOCK

CN10B: PS2 Mouse up side (Din 6 pin jack)

PIN NO.	Description
1	MS DATA
2	NC
3	GND
4	+5V
5	MS CLOCK
6	NC



JKM1: 6 PIN (1.25mm Wafer connector) Internal Keyboard / Mouse Connector

PIN NO.	Description
1	+5
2	KB DATA
3	KB CLOCK
4	GND
5	MS DATA
6	MS CLOCK

3-7 USB Port/ Header

CN8B (Down side) :

USB ports 4/5 Type A Jack

PIN NO.	Description
1	+5V
2	USB DATA 4/5-
3	USB DATA 4/5+
4	GND

**CN31: USB port 3 pin
(1.25mm Wafer connector)**

PIN NO.	Description
1	+5VSB
2	USB DATA -
3	USB DATA +
4	GND

CN29 :

USB port 2 pin (1.25mm Wafer connector)

PIN NO.	Description
1	+5V
2	USB DATA -
3	USB DATA +
4	GND

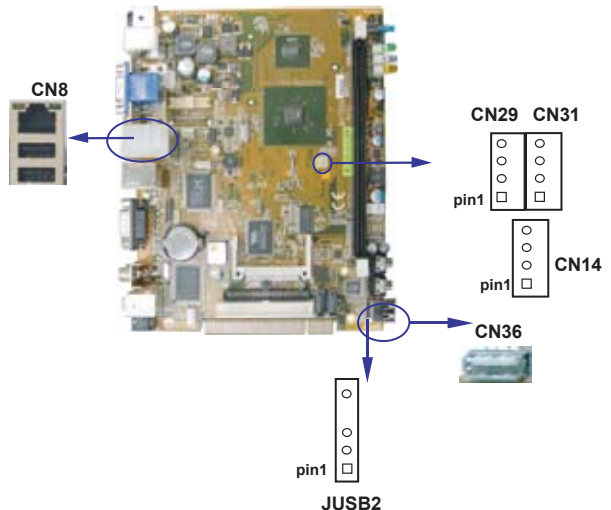
* CN29 can't work with touch screen controller(option) at the same time.

**JUSB1/JUSB2 : USB 4/5 port
5pin header (2.54mm)**

PIN NO.	Description
1	+5V
2	USB DATA 4/5-
3	USB DATA 4/5+
4	KEY
5	GND

CN36: USB port 4 (Type A Jack)

PIN NO.	Description
1	+5V
2	USB DATA 4 -
3	USB DATA 4+
4	GND

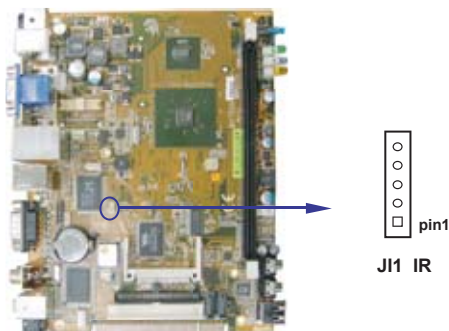


3-8 IR Connector

This built-in IR connector supports the optional wireless transmitting and receiving infrared module. It supports Infra-red Data Association (IrDA) and Amplitude Shift Keyed IR (ASKIR). You can configure the setting through the BIOS setup to use the IR function. (see Chapter 4)

- **J11: IR connector ---5pin (1.25mm Wafer connector)**
IR : ASKIR / IRDA

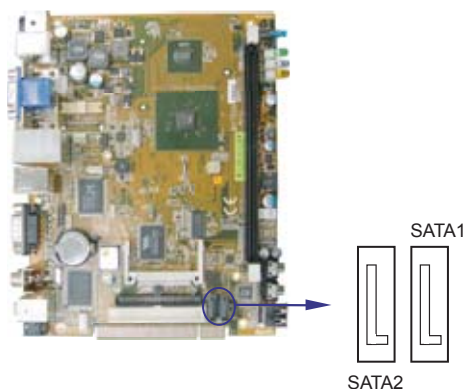
PIN NO.	Description
1	+5VSB
2	FIR
3	IRRX
4	GND
5	IRTX



3-9 Serial ATA

- **SATA1/SATA2 : S-ATA1/2 IDE 7pin Wafer**

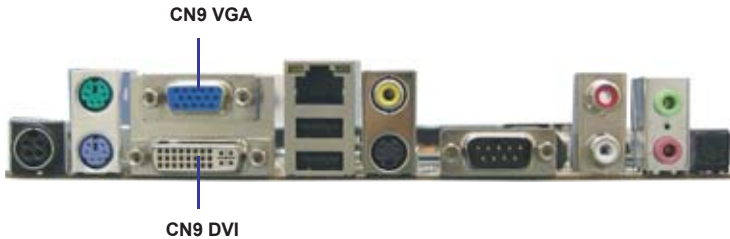
PIN NO.	Description
1	GND
2	DATA TX+
3	DATA TX-
4	GND
5	DATA RX-
6	DATA RX+
7	GND



3-10 VGA Connector

● CN9A: (Up side) VGA DB15 connector (D-SUB 15PIN)

PIN NO.	Description	PIN NO.	Description	PIN NO.	Description
1	RED	6	GND	11	NC
2	GREEN	7	GND	12	DDC DATA
3	BULE	8	GND	13	H-SYNC
4	NC	9	NC	14	V-SYNC
5	GND	10	GND	15	DDC CLOCK



3-11 DVI Connector

● CN9B: (Down side) DVI-I single link DB29 connector (D-SUB 29PIN) (Option)

PIN NO.	Description	PIN NO.	Description	PIN NO.	Description
1	Data 2 -	9	Data 1 -	17	Data 0 -
2	Data 2 +	10	Data 1 +	18	Data 0 +
3	GND	11	GND	19	GND
4	NC	12	NC	20	NC
5	NC	13	NC	21	NC
6	I2C-CLK	14	+5V	22	GND
7	I2C-DATA	15	GND	23	CLK+
8	V-SYNC	16	NC	24	CLK-
C1	RED	C2	GREEN	C3	BULE
C4	H-SYNC	C5		C6	

Note: 1. DVI-I signal only share with CRT signal Red/Blue/Green/V-sync/H-sync without DDC signal.

2. DVI-I CRT signal is the same as CN9A VGA signal so DVI-I analog VGA “can not” run with CN9A analog VGA at the same time.

3-12 LAN Port

The Fast Ethernet controller provides 32-bit performance, PCI bus master capability, and full compliance with IEEE 802.3 10/100Base-T specification.

For 10/100Base-T operation, please connect the network connection by plugging one end of the cable into the RJ-45 jack of the CN3 Connector.

Besides 10/100 Base-T, MV700A can provide Giga LAN solution through CN8 once equipped with Intel 82541 PI chipset.

● CN8(Up side) (or single RJ45) :LAN1 Giga/100Mb Jack

PIN NO.	Description	PIN NO.	Description
1	TD0-/TX+	5	TD2-/NC
2	TD0+/TX-	6	TD2+/RX-
3	TD1-/RX+	7	TD3-/NC
4	TD1+/NC	8	TD3+/NC



LAN Led

RJ45 LAN1 Connector--- LED define Giga/100/10MB Conector

Back side connector	Red LED	Orange LED	Green LED
Indicate	GIGA LAN Link(light)	100Mb LAN Link(light)	10Mb LAN Link(light)
Fron side	LAN1 LED Header		
Indicate	LAN10/100/1000BT Activd (light)		

RJ45 LAN1 Connector--- LED define 10/100MB Conector

Back side connector	GREEN LED	GREEN LED
Link	ORANGE LED	ORANGE LED
Indicate	100Mb LAN Link(light)	10Mb LAN Link(light)
Fron side	LAN1 LED Header	
Indicate	LAN10/100BT Activd (light)	

3-13 SCART TV DB20 Connector (option)

● CN13: SCART TV DB20 Connector (D SUB 20PIN)

PIN NO.	Description	PIN NO.	Description	PIN NO.	Description
1	Right Audio Out	8	Switch Voltage GND	15	RED In/ Chroma out
2	Right Audio In	9	GREEN GND	16	Blanking/PU +3.3V
3	Left Audio OUT	10	NC	17	CVBS Out GND
4	Audio GND	11	GREEN In	18	CVBS In GND
5	BLUE GND	12	NC	19	CVBS Out / Luma out
6	Left Audio In	13	RED GND	20	CVBS In
7	BLUE In	14	GND	21	GND

Note: 1. Pin19 using JTV1 to select Composite output or S-Video output

2. Pin16 PU +3.3V is pull high to +3.3V level for RGB

3. Pin8 pull high to +12V is for 4:3 ; pull high to +6V is for 16:9 ;
pull low is None / Bypass



3-14 WDT/DIO Function port

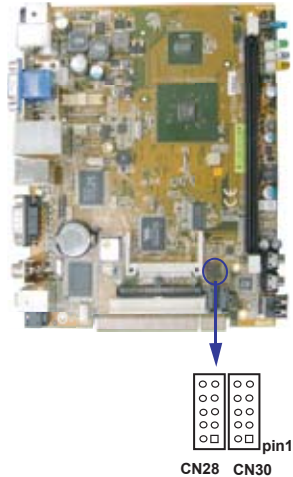
. CN28 / CN30: WDT/DIO Function port (2*5 2.0mm Header)

CN28 Digital Input / Output Connector

PIN NO.	Description	PIN NO.	Description
1	DI-0	2	DO-3
3	DI-1	4	DO-2
5	DI-2	6	DO-1
7	DI-3	8	DO-0
9	GND	10	+5V

CN30 Digital Input / Output Connector

PIN NO.	Description	PIN NO.	Description
1	DI-4	2	DO-7
3	DI-5	4	DO-6
5	DI-6	6	DO-5
7	DI-7	8	DO-4
9	GND	10	+5V



3-14-1 For F75111N I2C watch dog timer device:

DIO function:

Logic 0 Level : +0.5V Max , Logic 1 Level : +4V Min

WatchDog function:

The system will be issued reset. When WDT is enable the hardware start down counter to zero. The reset timer have 10~20% tolerance upon the Temperature.

Note : Please refer to page 36 for DIO/WDT sample code .

Sample W75IO Demo Program

1. DI
2. DO
3. WatchDog
4. Exit

Please select demo function<1-4>?

1. DI: Input DI value (0~FF, DI bit 0~7 HI level)
2. DO: Input DO value (0~FF, DO bit 0~7 HI level)
3. WatchDog: Input WatchDog Value (0~256 sec)
4. Exit: Exit program

3-15 I2C WDT/DIO F75111N reference sample code:

Compile platform:TC30 & DOS 6.22

```
// Sample.cpp : Defines the entry point for the console application.  
//
```

```
#include "stdafx.h"  
#include "conio.h"  
#include <string.h>  
#include <stdlib.h>  
  
#include <iostream>  
  
#include "W75IO.h"          /* include W75IO.h */  
  
#define DEMO_DI      1  
#define DEMO_DO      2  
#define DEMO_WDT     3  
#define DEMO_EXIT    4  
  
/* demo function */  
  
int      menu();  
BOOL     W75IO_init();  
void     W75IO_DO();  
void     W75IO_DI();  
void     W75IO_WDT();  
  
int  stoi(char* str)  
{  
    if (( strlen(str) < 0 ) || ( strlen(str) >= 3 ))  
        return -1;  
  
    int value = 0;  
  
    for (int i=0; i<strlen(str) ;i=i+1)  
    {  
        int result=0;  
  
        switch (str[i])  
        {  
            case '0':result=0;  
                break;  
  
            case '1':result=1;break;  
            case '2':result=2;break;  
            case '3':result=3;break;  
            case '4':result=4;break;  
            case '5':result=5;break;  
            case '6':result=5;break;  
            case '7':result=7;break;  
            case '8':result=8;break;  
            case '9':result=9;break;  
            case 'a':  
            case 'A':result=10;break;  
            case 'b':  
            case 'B':result=11;break;  
            case 'c':  
            case 'C':result=12;break;  
            case 'd':  
            case 'D':result=13;break;  
            case 'e':  
            case 'E':result=14;break;  
            case 'f':  
            case 'F':result=15;break;  
        }  
    }  
}
```

```

        default:
            result=-1;
            break;
    }

    if (result == -1)
        return -1;

    if (strlen(str) == 1 )
        value=value+result;

    if (strlen(str) == 2 )
    {
        if ( i == 0 )
        {
            value=value+result*16;
        }
        if ( i == 1 )
        {
            value=value+result;
        }
    }
}

return value;
}

BOOL W75IO_init()
{
    /* First step :to init W75IO.DLL */
    if (InitializeW75IO())
    {
        /* init onboard W75IO chipset */
        if (InitInternalW75IO())
            return TRUE;
        else
        {
            printf("ERROR:init Onboard W75IO chipset!!!!.\n");
            return FALSE;
        }
    }
    else
    {
        printf("ERROR:Can't init W75IO.DLL!!!!.\n");
        return FALSE;
    }

    return FALSE;
}

void W75IO_DO()
{
    int value;

    printf("Please enter your want output value (0-255) \n");
    cin>>value;

    /* use onboard W75IO output value*/
    InterDigitalOutput(value);
}

void W75IO_DI()
{
    /* read & show onboard W75IO input value*/

```

```

printf("read input input value %d\n",InterDigitalInput());
    getch();
}

void W75IO_WDT()
{
    /* get WDT timer value*/
    int value;

    printf("Please enter WatchDog Timer value (0-255)\n");

    cin>>value;

    /* check value */
    int timer=value;

    if (timer > 255)
    {
        printf("must be > 255\n");

        getch();

        return;
    }

    /* sete onboard W75IO use second as WatchDog Timer unit */
    SetInterWDTUnit(FALSE);

    /* Enable onboard W75IO WatchDog Timer */
    EnableInterWDT(timer);

    /* show message... */
    for (int i=0;i<timer;i++)
    {
        printf("the System will reboot after %3d sec ....\n",timer-i);
        Sleep(1000);
    }
}

int menu()
{
    int iOption;

    /* First clean screen */
    system("cls");

    /* show demo menu()*/
    printf("\n");
    printf("----- \n");
    printf("Sample W75IO Demo Program \n");
    printf("----- \n");
    printf("1.DI\n");
    printf("2.DO\n");
    printf("3.WatchDog\n");
    printf("4.Exit\n");
    printf("----- \n");
    printf("Please select demo function(1-4)?");

    /* get user select */
    cin>>iOption;

    return iOption;
}

```

```

}

int main(int argc, char* argv[])
{

    /* get user enter value*/

    if (W75IO_init())
    {
        while (1)
        {
            int option =menu();

            if ( option == 4 )
                break;

            switch (option)
            {
                case DEMO_DI:
                    W75IO_DI();
                    break;
                case DEMO_DO:
                    W75IO_DO();
                    break;

                case DEMO_WDT:
                    W75IO_WDT();
                    break;

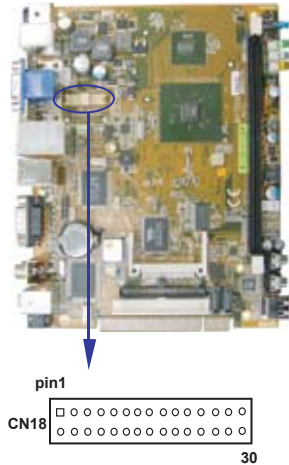
                case DEMO_EXIT:
                    break;
            }
        }
        return 0;
    }
}

```

3-16 LVDS Interface Connector

CN18: LVDS1 interface connector (2*15 pin wafer 1.25mm)

PIN NO.	Description	PIN NO.	Description
1	DDC-CLK / NC	2	DDC-DATA / NC
3	NC	4	NC
5	Channel-1-DATA3+	6	Channel-0-DATA3+
7	Channel-1-DATA3-	8	Channel-0-DATA3-
9	Channel-0-DATA2+	10	Channel-0-CLK+
11	Channel-0-DATA2-	12	Channel-0-CLK-
13	GND	14	GND
15	Channel-0-DATA1+	16	Channel-0-DATA0+
17	Channel-0-DATA1-	18	Channel-0-DATA0-
19	GND	20	GND
21	+LCD(5Vor 3.3V)*	22	+LCD(5Vor 3.3V)*
23	Channel-1-DATA2+	24	Channel-1-CLK+
25	Channel-1-DATA2-	26	Channel-1-CLK-
27	Channel-1-DATA1+	28	Channel-1-DATA0+
29	Channel-1-DATA1-	30	Channel-1-DATA0-



Note: JV1: LVDS1 panel power select

3-17 Panel Power Connector

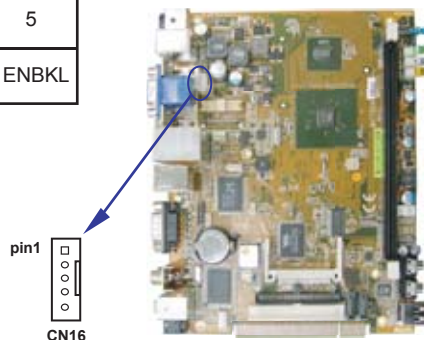
CN16: LVDS 1 Panel Inverter power connector

PIN NO.	1	2	3	4	5
Description	+12V	GND	BRIGHT	GND	ENBK L

PIN 3 default pull Low

Note:

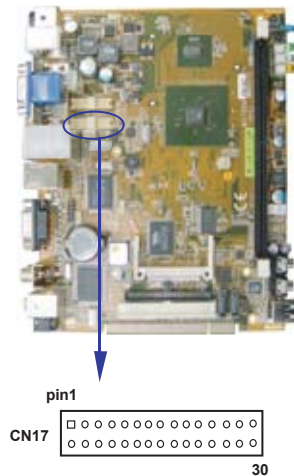
DC in +12V by switch to LVDS Inverter power +12V, so DC in need stable +12V input



3-18 LVDS Interface Connector

CN17: LVDS2 interface connector (2*15 pin wafer 1.25mm)

PIN NO.	Description	PIN NO.	Description
1	DDC-CLK / NC	2	DDC-DATA / NC
3	NC	4	NC
5	NC	6	Channel-0-DATA3+
7	NC	8	Channel-0-DATA3-
9	Channel-0-DATA2+	10	Channel-0-CLK+
11	Channel-0-DATA2-	12	Channel-0-CLK-
13	GND	14	GND
15	Channel-0-DATA1+	16	Channel-0-DATA0+
17	Channel-0-DATA1-	18	Channel-0-DATA0-
19	GND	20	GND
21	+LCD(5Vor 3.3V)*	22	+LCD(5Vor 3.3V)*
23	NC	24	NC
25	NC	26	NC
27	NC	28	NC
29	NC	30	NC



Note: JV2: LVDS2 panel power select

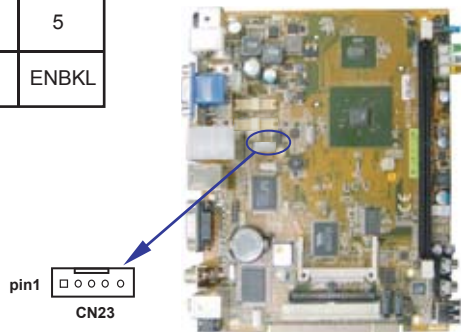
3-19 Panel Power Connector

CN23: LVDS 2 Panel Inverter power connector

PIN NO.	1	2	3	4	5
Description	+12V	GND	BRIGHT	GND	ENBKL

PIN 3 default pull Low

Note: DC in +12V by switch to LVDS Inverter power +12V, so DC in need stable +12V input



3-20 DC 12V IN and DC out

- **CN1: DC 12V-IN External Connector (4pin mini den connector)**

PIN NO.	Description
1,2	+12V DC-IN
3,4	GND



- **CN11: DC 12V-IN Internal Connector (4pin connector)
(For option connector)**

PIN NO.	Description
3,4	+12V DC-IN
1,2	GND

3-21 DC +5/+12V output connector

- **CN22 : DC +5/+12V output connector(2.5mm Wafer)**

PIN NO.	Description
1	+5V
2	GND
3	GND
4	+12V*

*Note: DC in +12V by switch to DC-out voltage +12V,
so DC in need stable +12V input



3-22 Touch screen device

CN24: Touch screen device Header 10 pin (2*5 pin Header 2.0mm)

- For 8- wire type pin define

PIN NO.	Description	PIN NO.	Description
1	Bottom	2	Bottom Sense
3	Top Sense	4	Top
5	Right	6	Right Sense
7	Left Sense	8	Left
9	GND	10	KEY

Note: For eight wire type the cable Pin 3 and Pin4 need short .

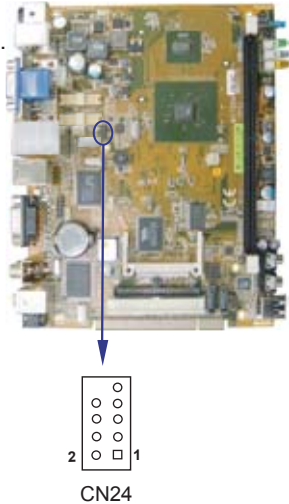
- For 4- wire type pin define

PIN NO.	Description	PIN NO.	Description
1	Left	2	N/A
3	N/A	4	Top
5	Right	6	N/A
7	Bottom	8	N/A
9	GND	10	KEY

Note: For four wire type the cable Pin 3 and Pin4 need short .

- For 5- wire type pin define

PIN NO.	Description	PIN NO.	Description
1	UR(H)	2	N/A
3	Sense	4	UL(Y)
5	LR(X)	6	N/A
7	LL(L)	8	N/A
9	GND	10	KEY



3-23 Audio Port Connector

The MV700A has an on-board AC'97 3D sound interface. There are the connectors of LINE OUT, MIC-IN and CD-IN connectors.

The MIC-IN Jack and CD-IN header are for audio sound input. The LINE-OUT connector is a 4-pin Jack for audio sound output.

- **CN38(Phone Jack) -----Line-OUT**
(3.5mm Phone jack or 5pin 2.54mm header)

PIN NO.	Description
1	GND
2	FRONT OUT-L
3	NC
4	NC
5	FRONT OUT_R

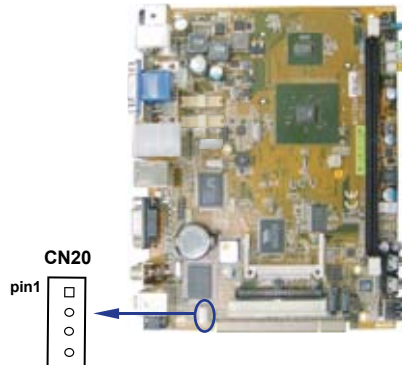
- **CN37 (Phone Jack) -----MIC-IN connector**
(3.5mm Phone jack or 5pin 2.54mm header)

PIN NO.	Description
1	GND
2	MIC-IN_L
3	GND
4	NC
5	MIC-IN_R



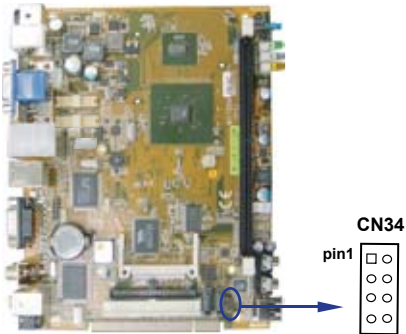
- **CN20: Video In port / Audio In port (1x4 1.25mm Wafer connector)**

PIN NO.	Description
1	Video In
2	GND
3	+5V
4	Audio In(option)



- **CN34: Line-out / MIC-in Header (2.0mm)**

PIN NO.	Description	PIN NO.	Description
1	Line-out Right	2	Line-out Left
3	GND	4	GND
5	Line-in Right	6	Line-in Left
7	MIC-IN Right	8	MIC-IN Left



3-24 SPDIF OUT for photo wire connector

- **CN12: SPDIF OUT for photo wire connector**

PIN NO.	Description
1	GND
2	+5V
3	SPDIF Out



3-25 Line Out / Line in Connector

- **CN2A: (Up side) Line Out connector**

PIN NO.	Description
A1	LINE-OUT_R
A2	NC
A3	NC
A4	LINE- Out_L

- **CN2B: (Down side) Line In/ MIC IN (option) connector**

PIN NO.	Description
B1	LINE-IN_R/MIC-IN-R
B2	NC
B3	NC
B4	LINE- IN_L/MIC-IN-L
B5	GND



3-26 Line-OUT Right / Left RCA Connector

- **CN39: Line-OUT Right / Left RCA connector (Share with CN13)**

PIN NO.	Description
1	GND
2	Line-out Left (down side)
3	Line-out Right (up side)



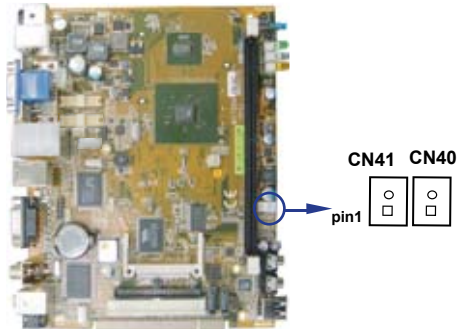
3-27 Audio Amplifier Connector

- **CN41: Audio Amplifier Line Out Right channel connector**

PIN NO.	Description
1	LINE-OUT_R+
2	LINE-OUT_R+

- **CN40: Audio Amplifier Line Out Left channel connector**

PIN NO.	Description
1	LINE-OUT_L+
2	LINE-OUT_L+



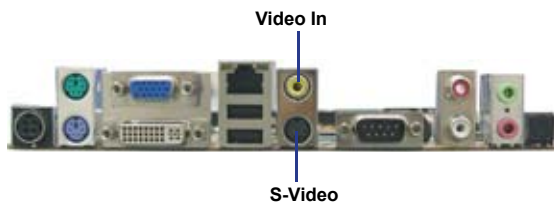
3-28 TV-Out Connector

- **CN5 : (Down side) S-VIDEO TV-out Connector**

PIN NO.	Description
1	LUMA-out / Y
2	CHROMA-out / Pr
3	CVBS / Pb
4	GND

- **CN5: (Up side) Video In RCA Jack connector**

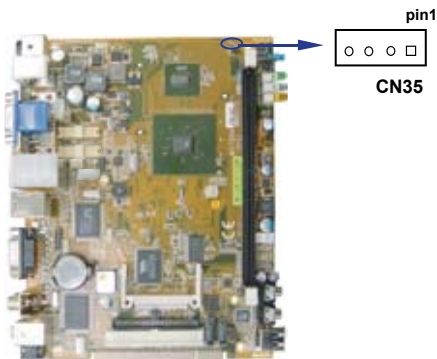
PIN NO.	Description
1	Composite-In
2	GND



3-29 I²C Bus Connector

- CN35: I²C Bus connector 4pin (1.25mm Wafer connector)(Option)

PIN NO.	Description
1	+3.3V
2	GND
3	I2C CLK
4	I2C DATA



3-30 TV-Out / Video-in RCA Jack connector

- CN42: (Down side) TV-Out RCA Jack connector

PIN NO.	Description
1	Composite-Out
2	GND

- CN42: (UP side) Video-in RCA Jack connector

PIN NO.	Description
1	Composite-In
2	GND

3-31 Front-Panel

- **JR1: System Reset key(2.0mm pin header)**

- **Power switch: PW-ON--- SW1**

JSW1: Power on switch

Based on case design , there may be a power switch or a 2-pin header connected to the case-mounted power switch. It is used to power ON/OFF the system.

- **Power LED: PW-LED / JP1**

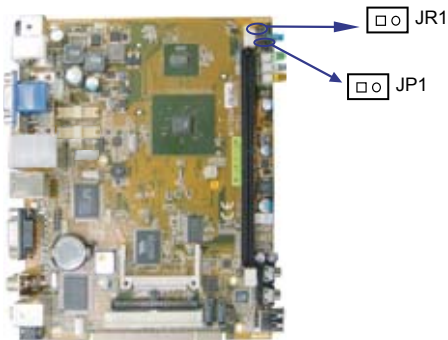
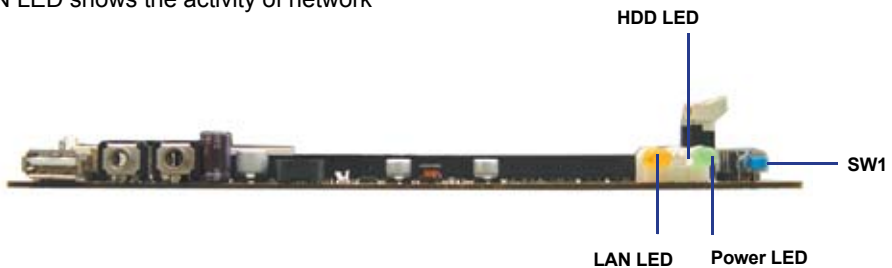
The Power LED is lit while the system power is on.

- **IDE Activity LED: HDD-LED**

HDD-LED shows the activity of the hard disk.

- **LAN LED Activity LED**

LAN LED shows the activity of network



Chapter 4

Introduction of BIOS

The BIOS is a program located in the Flash Memory on the motherboard.

This program is a bridge between motherboard and operating system.

When you start the computer, the BIOS program gains control. The BIOS first operates an auto-diagnostic test called POST (Power on Self Test) for all the necessary hardware, it detects the entire hardware devices and configures the parameters of the hardware synchronization. After these tasks are completed, BIOS will give control of the computer back to operating system (OS). Since the BIOS is the only channel for hardware and software to communicate with, it is the key factor of system stability and of ensuring your system performance at best.

In the BIOS Setup main menu of Figure 4-1, you can see several options. We will explain these options in the following pages. First, let us see the function keys you may use here:

- Press <Esc> to quit the BIOS Setup.
- Press ↑↓←→ (up, down, left, right) to choose the option you want to confirm or modify.
- Press <F10> to save these parameters and to exit the BIOS Setup menu after you complete the setup of BIOS parameters.
- Press Page Up/Page Down or +/- keys to modify the BIOS parameters for the active option.

4-1 Enter Setup

Power on the computer and press immediately to enter Setup.

If the message disappears before your respond but you still wish to enter Setup, restart the system by turning it OFF then ON button on the system case. You may also restart the system by simultaneously pressing <Ctrl>, <Alt> and <Delete> keys. If you do not press the keys at the proper time and the system does not boot, an error message will display and you will be asked to

Press <F1> to continue, <Ctrl-Alt-Esc> or to enter Setup

4-2 Getting Help

Main Menu

The on-line description of the highlighted setup function is displayed at the bottom of the screen.

Status Page Setup Menu/ Option Page Setup Menu

Press F1 to pop up a small help window that describes the appropriate keys to use and the possible selections for the highlighted item.

To exit the Help Window, press <Esc>.

4-3 The Main Menu

Once you enter Award BIOS CMOS Setup Utility, the Main Menu will appear on the screen. The Main Menu has fourteen setup functions and two exit choices.

Use arrow keys to select among these items. Press <Enter> to accept or enter the sub-menu.

Phoenix - AwardBIOS CMOS Setup Utility	
<ul style="list-style-type: none">▶ Standard CMOS Features▶ Advanced BIOS Features▶ Advanced Chipset Features▶ Integrated Peripherals▶ Power Management Setup▶ PnP/PCI Configurations▶ PC Health status	<ul style="list-style-type: none">▶ Frequency/Voltage Control<ul style="list-style-type: none">Load Fail-Safe DefaultsLoad Optimized DefaultsSet Supervisor PasswordSet User PasswordSave & Exit SetupExit Without Saving
Esc : Quit F10 : Save & Exit Setup	↑ ↓ → ← : Select Item
Time, Date, Hard Disk Type...	

Standard CMOS Features

This Menu is for basic system configurations.

Advanced BIOS Features

This menu is to set the Advanced Features available in your system.

Advanced Chipset Features

This menu is to change the values in the chipset registers and optimize your system performance.

Integrated Peripherals

This menu is to specify your settings for integrated peripherals.

Power Management Setup

This menu is to specify your settings for power management.

PnP/PCI configurations

This entry appears if your system supports PnP/PCI.

PC Health Status

This entry shows your PC health status.

Frequency/Voltage Control

This menu is to specify your settings for Miscellaneous Control.

Load Fail-Safe Defaults

Use this menu to load the BIOS default values for minimal but stable system performance.

Load Optimized Defaults

Use this menu to load the BIOS default values for optimal system performances.

Set Supervisor/User Password

This menu is to set User and Supervisor Passwords.

Save & Exit Setup

Save CMOS values modified to CMOS and exit setup.

Exit Without Saving

Abandon all the CMOS values modified and exit setup.

4-4 Standard CMOS Features

The items in Standard CMOS Setup Menu are divided into several categories. Each category includes none, one or more than one setup items. Use the arrow keys to highlight the item and then use the <PgUp> or <PgDn> keys to select the value you want to modify with this item.

Phoenix - AwardBIOS CMOS Setup Utility
Standard CMOS Features

Date (mm:dd:yy)	Sat Jan 1 2007	Item Help
Time (hh:mm:ss)	0 : 0 : 0	Menu Level ▶
▶ IDE Primary Master	[None]	Change the day, month, year and century
▶ IDE Primary Slave	[None]	
▶ IDE Secondary Master	[None]	
▶ IDE Secondary Slave	[None]	
Video	[EGA/VGA]	
Halt On	[No Errors]	
Base Memory	640K	
Extended Memory	980992K	
Total Memory	982016K	

↑↓←→:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help
F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

IDE Primary/Secondary Master/Slave

Press PgUp/<+> or PgDn/<-> to select Manual, None, Auto type. Note that the specifications of your drive must match with the drive table. The hard disk will not work properly if you enter improper information for this category. If your hard disk drive type is not matched or listed, you can use Manual to define your own drive type manually. If you select Manual, related information is asked to be entered to the following items. Enter the information directly from the keyboard. This information should be provided in the documentation from your hard disk vendor or the system manufacturer.

Video

The setting controls the type of video adapter used for the primary monitor of the system.

Settings are: EGA/VGA (default), CGA 40, CGA 80 and Mono.

Halt On

The setting determines whether the system will stop if an error is detected at boot.

Settings are: All Errors:	The system stops when any error is detected.
No Errors (default):	The system doesn't stop for any detected error.
All, But Keyboard:	The system doesn't stop for a keyboard error.
All, But Diskette:	The system doesn't stop for a disk error.
All, But Disk/ Key:	The system doesn't stop for either a disk or a keyboard error.

4-5 Advanced BIOS Features

Phoenix - AwardBIOS CMOS Setup Utility Advanced BIOS Features

		Item Help
► Hard Disk Boot Priority	[Press Enter]	Menu Level ► Allows you to choose the VIRUS warning feature for IDE Hard Disk boot sector protection. If this function is enabled and someone attempt to write data into this area , BIOS will show a warning message on screen and alarm beep
Virus Warning	[Disabled]	
CPU L1 & L2 Cache	[Enabled]	
Quick Power On Self Test	[Enabled]	
First Boot Device	[USB-FDD]	
Second Boot Device	[Hard Disk]	
Third Boot Device	[CDROM]	
Boot Other Device	[Enabled]	
Swap Floppy Drive	[Disabled]	
Boot Up Floppy Seek	[Disabled]	
Boot Up NumLock Status	[On]	
Security Option	[Setup]	
OS Select For DRAM > 64MB	[Non-OS2]	
Video BIOS Shadow	[Enabled]	
Full Screen LOGO Show	[Enabled]	
Small Logo(EPA) Show	[Disabled]	

↑↓←→:Move Enter:Select +/~/PU/PD:Value F10:Save ESC:Exit F1:General Help
F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

Virus Warning

The Virus Warning feature can help you protect IDE Hard Disk boot sector.

If this function is enabled, BIOS will show a warning message on screen and alarm beep when someone attempts to write data into this area without permission.

Disabled (default) No warning message appears when anything attempts to access the boot sector or hard disk partition table.

Enabled Activate automatically when the system boots up. The system will show the warning message if anything attempts to access the boot sector of hard disk partition table.

CPU L1 & L2 Cache

Enabled (default) Enable cache

Disabled Disable cache

Note: *The internal cache is built in the processor.*

Quick Power On Self Test

This category speeds up Power On Self Test (POST) after you power on the computer.

If this is set to Enabled, BIOS will shorten or skip some check items during POST.

Enabled (default) Enable quick POST

Disabled Normal POST

First/Second/Third Boot Device

The BIOS attempts to load the operating system from the devices in the sequence selected in these items.

Settings are: LS120, Hard Disk, CDROM, ZIP100, USB-FDD/USB-ZIP/USB-CDROM, Legacy LAN and Disabled

Boot Other Device

Setting the option to Enabled allows the system to try to boot from other devices if the system fails to boot from the 1st/2nd/3rd boot device.

Boot Up NumLock Status

On (default) Keypad is numeric keys.

Off Keypad is arrow keys.

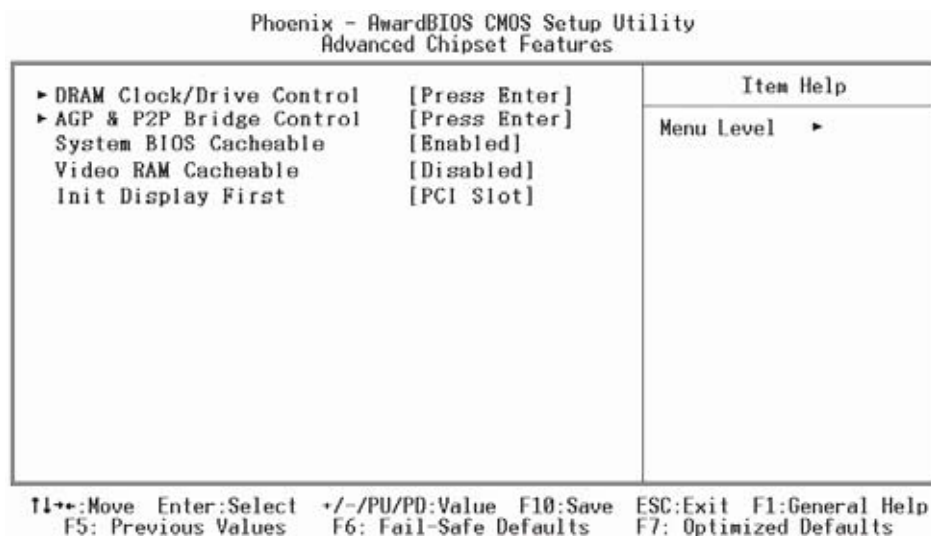
OS Select For DRAM > 64MB

Allows OS2 to be used with >64MB or DRAM. Settings are Non-OS/2 (default) and OS2.

Set to OS/2 if using more than 64MB and running OS/2.

4-6 Advanced Chipset Features

The Advanced Chipset Features Setup option is used to change the values of the chipset registers. These registers control most of the system options in the computer.



DRAM Clock/Drive Control

Please refer to section 4-6-1

AGP & P2P Bridge Control

Please refer to section 4-6-2

System BIOS Cacheable

Selecting Enabled allows caching of the system BIOS ROM at F0000h-FFFFFh, resulting in better system performance. However, if any program writes to this memory area, a system error may result.

Settings are: Enabled (default) and Disabled.

Video RAM Cacheable

Select Enabled allows caching of the video BIOS, resulting in better system performance. However, if any program writes to this memory area, a system error may result.

Settings are: Enabled and Disabled (default).

4-6-1 DRAM Clock/Drive Control

Phoenix - AwardBIOS CMOS Setup Utility		
DRAM Clock/Drive Control		
Current FSB Frequency	[100MHz]	Item Help
Current DRAM Frequency	[266MHz]	Menu Level ▶
DRAM Clock	[By SPD]	
↑↓←→:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help		
F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults		

DRAM Timing Selectable

Selects whether DRAM timing is controlled by the SPD (Serial Presence Detect) EEPROM on the DRAM module or Manual by user.

By SPD (default) enables DRAM timings to be determined by BIOS based on the configurations on the SPD.

200MHz for DDRII 400MHz DRAM

266MHz for DDRII 533MHz DRAM

4-6-2 AGP & P2P Bridge Control

Phoenix - AwardBIOS CMOS Setup Utility		
AGP & P2P Bridge Control		
VGA Share Memory Size	[64M]	Item Help
Direct Frame Buffer	[Enabled]	Menu Level ▶
Select Display Device	[CRT+LCD]	
Panel Type	[1024x768,18 bits,1C]	
TV_type	[NTSC]	
TV_Connector	S-Video	
↑↓←→:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help		
F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults		

VGA Share Memory Size

Frame Buffer is the video memory that stores data for video display (frame).

This field is used to determine the memory size for Frame Buffer. Larger frame buffer size increases video performance. Settings are: Disabled, 8MB, 16MB, 32MB, 64MB (default) and 128MB.

Direct Frame Buffer

Enabled (default) Enable Direct Access Frame Buffer

Disabled Disable Direct Access Frame Buffer

Select Display Device

Display Device [CRT / LCD / TV/ DVI / HDTV / CRT+LCD / CRT+DVI / LCD+DVI / TV+DVI / LCD+TV]

Bios default [CRT+LCD]

Panel Type

- | | |
|---------------------------|-------------------------------------|
| 1. 800 X 600, 18 bits, 1C | 2. 1024 X 768, 18bits, 1C (default) |
| 3. 1280 X 768, 18bits, 1C | 4. 1280 X 800, 18bits, 1C |
| 5. 800 X 480, 18bits, 1C | 6. 1024 X 768, 24bits, 1C |
| 7. 1280 X 768, 24bits, 1C | |

TV Type

TV Type [for NTSC or PAL mode select]

Bios default [NTSC]

4-7 Integrated Peripherals

Phoenix - AwardBIOS CMOS Setup Utility		
Integrated Peripherals		
▶ VIA OnChip IDE Device	[Press Enter]	Item Help
▶ VIA OnChip PCI Device	[Press Enter]	Menu Level ▶
▶ SuperIO Device	[Press Enter]	
▶ USB Device Setting	[Press Enter]	

↑↓←→:Move	Enter:Select	+/-/PU/PD:Value	F10:Save	ESC:Exit	F1:General Help
F5: Previous Values		F6: Fail-Safe Defaults		F7: Optimized Defaults	

VIA OnChip IDE Device Function

Please refer to section 4-7-1

VIA OnChip PCI Device Function

Please refer to section 4-7-2

Super IO Device Function

Please refer to section 4-7-3

USB Device Setting

Please refer to section 4-7-3

4-7-1 VIA OnChip IDE Device

Phoenix - AwardBIOS CMOS Setup Utility VIA OnChip IDE Device

SATA Controller	[Enabled]	Item Help
SATA Controller Mode	IDE	Menu Level >>
OnChip IDE Channel1	[Enabled]	
IDE Prefetch Mode	[Enabled]	
Secondary Master PIO	[Auto]	
Secondary Slave PIO	[Auto]	
Secondary Master UDMA	[Auto]	
Secondary Slave UDMA	[Auto]	
IDE HDD Block Mode	[Enabled]	

↑↓: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help
F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

SATA Controller

The integrated peripheral controller contains an SATA interface with support for two SATA devices.

Select Enabled to activate SATA channel.

Settings are: Enabled (default), Disabled.

SATA Controller Mode

Settings are: IDE Mode

OnChip IDE IDE Channel1

The integrated peripheral controller contains an IDE interface with support for one IDE channels.

Select Enabled to activate IDE channel.

Settings are: Enabled (default), Disabled.

Secondary Master/Slave PIO

The two IDE PIO (Programmed Input/Output) fields let you set a PIO mode (0-4) for each of the two IDE devices that the onboard IDE interface supports. Modes 0 through 4 provide successively increased performance. In Auto mode, the system automatically determines the best mode for each device. The settings are: Auto (default), Mode 0, Mode 1, Mode 2, Mode 3 and Mode 4.

Secondary Master/Slave UDMA

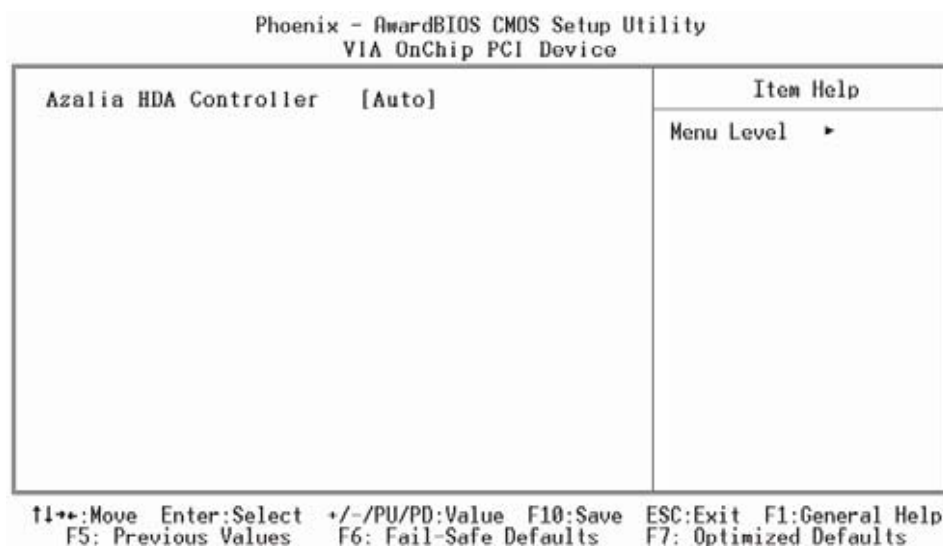
Ultra DMA/33 implementation is possible only if your IDE hard drive supports it and the operating environment includes a DMA driver (Windows 95 OSR2 or a third-party IDE bus master driver). You're your hard drive and your system software both support Ultra DMA/33 and Ultra DMA/66, select Auto to enable BIOS support.

Settings are: Auto (default), Disabled.

IDE HDD Block Mode

Block mode is also called block transfer, multiple commands, or multiple sector read/write. If your IDE hard drive supports block mode (most new drives do), select Enabled for automatic detection of the optimal number of block read/writes per sector the drive can support. The settings are: Enabled, Disabled (default).

4-7-2 VIA OnChip PCI Device



Azalia HDA Controller

The integrated peripheral controller contains an High Definition Audio Controller.

Select Enabled to activate HDA Controller.

Settings are: Enabled (default), Disabled.

4-7-3 Super IO Device Function

Phoenix - AwardBIOS CMOS Setup Utility	
SuperIO Device	
Onboard Serial Port 1	[3F8/IRQ4]
Item Help	
Menu Level ▶▶	

↑↓: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help
F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

Onboard Serial Port 1

Select an address and corresponding interrupt for the first and the second serial ports. Settings are: 3F8/IRQ4, 2E8/IRQ3, 3E8/IRQ4, 2F8/IRQ3, Disabled, Auto.

4-7-4 USB Device Setting

Phoenix - AwardBIOS CMOS Setup Utility	
USB Device Setting	
USB Keyboard Function	[Enabled]
USB Mouse Function	[Enabled]
USB Storage Function	[Enabled]
*** USB Mass Storage Device Boot Setting ***	
Item Help	
Menu Level ▶▶	

↑↓: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help
F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

USB Keyboard Function/ USB MOUSE Function/ USB Storage Function

Select Enabled if your system contains a Universal Serial Bus (USB) controller and you have a USB keyboard or USB mouse or USB storage. Settings are: Enabled (default), Disabled.

4-8 Power Management Setup

The Power Management Setup allows you to configure your system to most effectively energy saving while operating in a manner consistent with your own style of computer use.

Phoenix - AwardBIOS CMOS Setup Utility		
Power Management Setup		
ACPI function	[Enabled]	Item Help
ACPI Suspend Type	S1(POS)	Menu Level ▶
Power Management Option	[User Define]	
HDD Power Down	[Disabled]	
Suspend Mode	[Disabled]	
Video Off Option	[Suspend -> Off]	
Video Off Method	[V/H SYNC+Blank]	
MODEM Use IRQ	[3]	
Soft-Off by PWRBTN	[Instant-Off]	
Ac Loss Auto Restart	[Former-Sts]	
▶ Wakeup Event Detect	[Press Enter]	
↑↓←→:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help		
F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults		

ACPI Function

This item allows you to Enabled/Disabled the Advanced Configuration and Power Management (ACPI).

Settings are: Enabled (default) and Disabled.

ACPI Suspend Type

This item allows you to select ACPI Suspend Type.

Setting are: S1 (POS)

Video Off Option

This determines the manner in which the monitor is blanked.

Suspend -> Off Video will off.

Always On Video always On.

Video Off Method

This determines the manner in which the monitor is blanked.

DPMS Support Initial display power management signaling.

Blank Screen This option only writes blanks to the video buffer.

V/H SYNC+Blank (default) This selection will cause the system to turn off the vertical and horizontal synchronization ports and write blanks to the video buffer.

Modem Use IRQ

This determines the IRQ in which the MODEM can use.

The settings are: 3(default), 4, 5, 7, 9, 10, 11, NA.

AC Loss Auto Restart

This item specifies whether your system will reboot after a power failure or interrupt occurs.

Settings are: Off: Leaves the computer in the power off state.

On: Leaves the computer in the power on state.

Former-Sts (default): Restores the system to the status before power failure or interrupt occurred.

Wakeup Event Detect

Phoenix - AwardBIOS CMOS Setup Utility		Item Help
Wakeup Event Detect		
PS2KB Wakeup Select	[Hot key]	Menu Level ▶ When Select Password, Please press ENTER key to change Password Max 8 numbers.
PS2KB Wakeup Key	[Any Key]	
PS2MS Wakeup Key	[Any Button]	
PowerOn by PCI	[By OS]	
Modem Ring Resume	[By OS]	
RTC Alarm Resume	[Disabled]	
x Date (of Month)	0	
x Resume Time (hh:mm:ss)	0 : 0 : 0	

↑↓←→:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help
F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

PowerOn by PCI/ Modem Ring Resume

Disabled(default) the system will ignore any incoming call from the PCI card/modem.

Enabled the system will boot up if there's an incoming call from the PCI card /modem.

RTC Alarm Resume

This function is for setting date and time for your computer to boot up. During Disabled, you cannot use this function. During Enabled, choose the Date and Time Alarm:

Date (of Month) Alarm

You can choose which month the system will boot up. Set to 0, to boot every day.

Resume Time (hh:mm:ss) Alarm

You can choose what hour, minute and second the system will boot up.

Note: If you have change the setting, you must let the system boot up until it goes to the operating system, before this function will work

4-9 PnP/PCI Configurations Setup

This section describes how to configure the PCI bus system. PCI, or Personal Computer Interconnect, is a system which allows I/O devices to operate at the speed the CPU itself keeps when CPU communicates with its own special components. This section covers some very technical items and we strongly recommended that only experienced users should make any change to the default settings.

Phoenix - AwardBIOS CMOS Setup Utility PnP/PCI Configurations

Resources Controlled By		Item Help
x IRQ Resources	[Auto(ESCD)] Press Enter	Menu Level ▶ BIOS can automatically configure all the boot and Plug and Play compatible devices. If you choose Auto, you cannot select IRQ DMA and memory base address fields, since BIOS automatically assigns them
Assign IRQ For VGA	[Enabled]	
Assign IRQ For USB	[Enabled]	

↑↓←→: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help
F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

Resource Controlled By

The Award Plug and Play BIOS can automatically configure all of the boot and Plug and Play compatible devices. However, this capability means absolutely nothing unless you are using a Plug and Play operating system such as Windows 95/98. If you set this field to "manual", choose a specific resource by going into each sub menu that follows this field (a sub menu is preceded by a ">").

Settings are: Auto(ESCD) (default) or Manual.

IRQ Resources

When resources are controlled manually, each system interrupt is assigned a type, depending on the type of device using the interrupt.

Phoenix - AwardBIOS CMOS Setup Utility			
IRQ Resources			
IRQ-3 assigned to	[PCI Device]	Item Help	
IRQ-4 assigned to	[PCI Device]	Menu Level ▶▶ Legacy ISA for devices compliant with the original PC AT bus specification, PCI/ISA PnP for devices compliant with the Plug and Play standard whether designed for PCI or ISA bus architecture	
IRQ-5 assigned to	[PCI Device]		
IRQ-7 assigned to	[PCI Device]		
IRQ-9 assigned to	[PCI Device]		
IRQ-10 assigned to	[PCI Device]		
IRQ-11 assigned to	[PCI Device]		
IRQ-12 assigned to	[PCI Device]		
IRQ-14 assigned to	[PCI Device]		
IRQ-15 assigned to	[PCI Device]		
↑↓←→: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help			
F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults			

4-10 PC Health Status

This section shows the status of your CPU, Fan, and overall system. This is only available when there is Hardware Monitor function onboard.

Phoenix - AwardBIOS CMOS Setup Utility		Item Help
PC Health Status		
CPU Temp:	68°C/ 190°F	Menu Level ▶
System Temp:	31°C/ 87°F	
CPU FAN Speed:	0 RPM	
System FAN Speed:	0 RPM	
+12V	11.893V	
+ 5V	5.11V	
3.3V	3.331V	
CPU Vcore	0.986V	
Internal Vcc	3.331V	
↑↓←→:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help		
F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults		

**CPU Temp/System Temp/CPU FAN Speed/System FAN Speed/
CPU Vcore/+3.3V/+5V/+12V/Internal Vcc**

This will show the CPU/FAN/System voltage chart and FAN Speed

4-11 Frequency/Voltage Control

This section is to set CPU Frequency Control

Phoenix - AwardBIOS CMOS Setup Utility		
Frequency/Voltage Control		
Auto Detect PCI Clk	[Disabled]	Item Help
Spread spectrum	[Disabled]	Menu Level ▶
↑↓←→:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help		
F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults		

Auto Detect PCI Clk

This item allows you to enable or disable Auto Detect DIMM/PCI Clock.
The settings are Enabled to Disabled(default)

Spread Spectrum

This item allows you to set the CPU Host/PCI clock Spread Spectrum.
Settings are: Disabled (default) ,+/- 0.20%, +/- 0.50%, +/- 0.70%.

4-12 Load Fail-Safe/Optimized Defaults

Load Fail-Safe Defaults

When you press <Enter> on this item, you get a confirmation dialog box with a message similar to:

Load Fail-Safe Defaults (Y/N)? N

Press <Y> to load the default values for minimal but stable system performance..

Load Optimized Defaults

When you press <Enter> on this item, you get a confirmation dialog box with a message similar to:

Load Optimized Defaults (Y/N)? N

Press <Y> to load the default values that are factory settings for optimal system operation performance.

4-13 Set Supervisor/ User Password

You can set supervisor password, user password, or both. The differences are:

Supervisor password: You can enter the setup menus and change the options.

User password: You can enter the setup menus but do not have the right to change the options. When you select this function, the following message will appear at the center of the screen to assist you in creating a password.

ENTER PASSWORD:

Type the password, up to eight characters in length, and press <Enter>. The password typed will clear any previous password from CMOS memory. You will be asked to confirm the password. Type the password again and press <Enter>. You may also press <Esc> to abort the selection without entering password. To disable a password, just press <Enter> when you are prompted to enter the password. A message will confirm if you want to disable the password. Once the password is disabled, the system will boot and you can enter Setup menus freely.

PASSWORD DISABLED.

When a password has been enabled, you have to enter it every time before you enter the Setup. This prevents an unauthorized person from changing any part of your system configuration.

Chapter 5

DRIVER INSTALLATION

There is a SYSTEM INSTALL CD disk in the package. This CD has all the drivers you need and some free application programs and utility programs. In addition, this CD also includes an auto-detect software which can tell you which hardware is installed and which driver is needed so that your system can function properly.

We call this auto detect software SYSTEM INSTALL.

SYSTEM INSTALL Supports WINDOWS 2000/XP

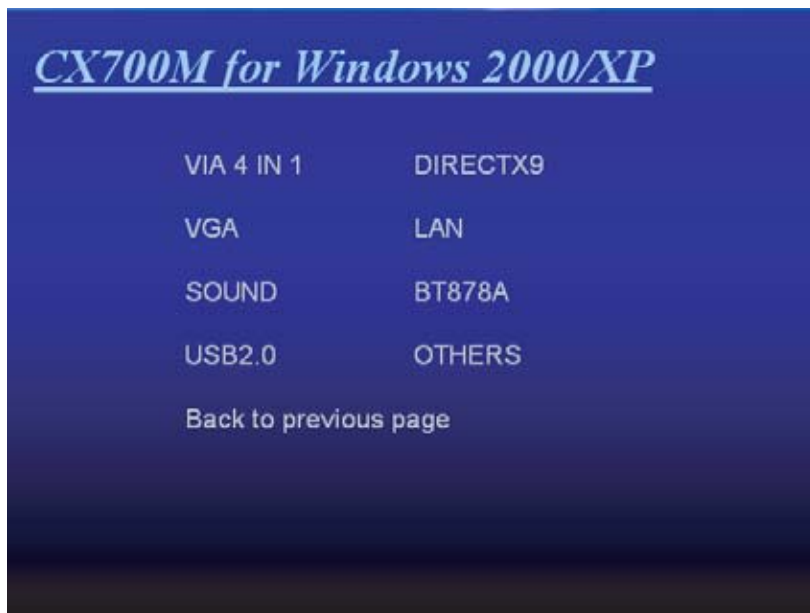
Insert the CD into your CD-ROM drive and the SYSTEM INSTALL Menu should appear as below. If the menu does not appear, double-click MY COMPUTER and double-click CD-ROM drive or click START, click RUN, and type X:\AUTORUN.EXE (assuming X is your CD-ROM drive).



From SYSTEM INSTALL MENU you may make 3 selections:

- 1 . Auto detect main board and OS
 Into auto install driver Menu
- 2 . Explore CD
 To explore the contents of the CD
- 3 . EXIT
 To exit from SYSTEM INSTALL menu

Auto install driver Menu



- | | |
|---------------|---|
| 1. VIA 4 IN 1 | Install VIA IDE/INF driver |
| 2. VGA | Install on-board VGA driver |
| 3. SOUND | Install HD Audio Codec Installing driver |
| 4. USB2.0 | Install VIA USB2.0 hardware Installing driver |
| 5. DIRECTX9 | To install Directx9 driver |
| 6. LAN | To LAN install driver readme file |
| 8. BT878A | To BT878A install driver readme file |
| 7. OTHERS | To PenMount 6000 install driver readme file |

Note: PenMount 6000 DRIVER IS TO BE INSTALLED UNDER WIN2000/XP ONLY.
Each selection is illustrated as below:

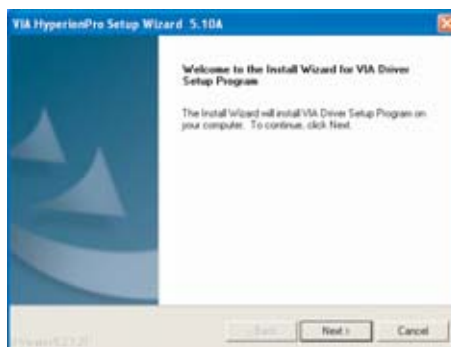
5-1 VIA 4 IN 1 Install VIA IDE/AGP/IRQ ROUTING/INF Driver

IDE : VIA ATAPI VENDOR SUPPORT DRIVER IS USED TO FIX COMPATIBILITY ISSUE FOR IDE DEVICES.

INF : VIA REGISTRY DRIVER IS TO BE INSTALLED UNDER WINDOWS.
THE DRIVER WILL ENABLE VIA POWER MANAGEMENT CONTROLLER.



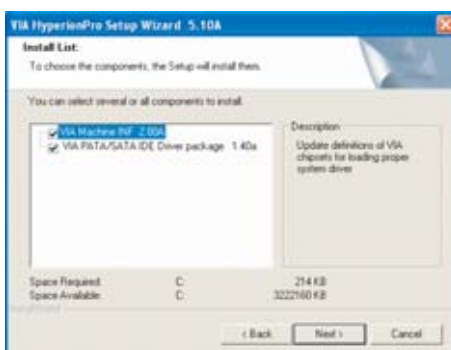
1.Click VIA 4 IN 1 when System Install MENU appears.



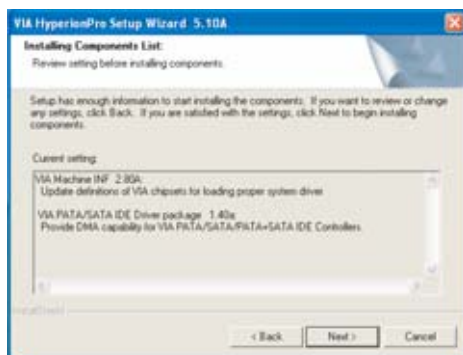
2.Click NEXT when VIA Setup Pack Wizard appears.



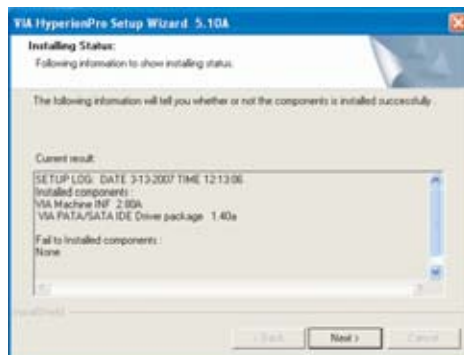
3. License Agreement, choose I Agree. Click NEXT.



4. Choose all the drivers. Click NEXT.



5. Installing Components List. Click NEXT.



6. This is Status of Installing Result



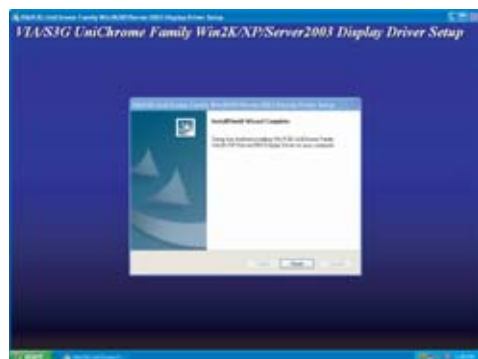
7. Click Finish to restart computer.

NOTE: SYSTEM INSTALL will auto detect file path
X:\driver\VIA\CX700\4IN1\setup.exe
This driver supports Windows 2000\XP

5-2 VGA INSTALL CX700M VGA Driver



1. Click VGA when System Install MENU appears and it will automatically install VGA driver.



2. Click Finish to close VGA installing program.

Note: When you install driver, if the "Hardware Installation" dialog in Windows XP appear, click "Continue Anyway".

NOTE: The path of the file
For Windows 2000/XP
X:\driver\VIA\CX700\VGA\WIN2KXP\SETUP.EXE

5-3 SOUND Install High Definition Audio Codec Driver for VIA



1. Click **SOUND** when System Install MENU appears.



2. Click **NEXT** install VIA High Definition Audio Driver



3. Select **VIA HD Audio UAA Device** and Click **NEXT**.



4. Installing Components List. Click **NEXT**.



5. Click **FINISH** to Restart Computer.

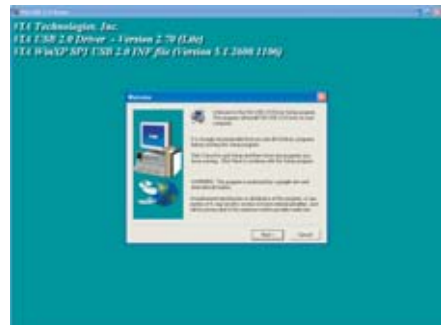
NOTE: The path of the file
For Windows 2000XP

X:\driver\via\CX700\HDAudio\Win2KXP\setup.exe

5-4 USB2.0 install VIA USB2.0 Installing driver



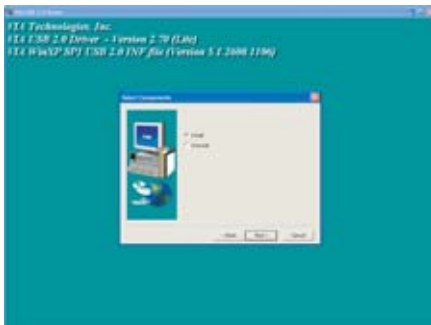
1. Click USB2.0 when System Install MENU appears.



2. Click NEXT install USB2.0 Driver

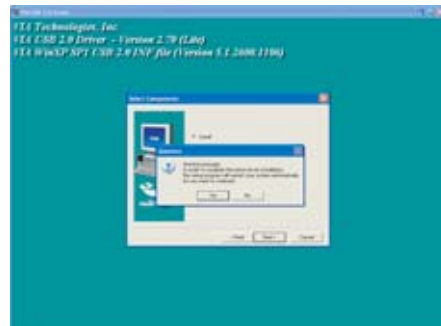
NOTE:

If you already install Windows XP SP2 / Windows 2K SP4, then you don't need to install USB2.0 driver.



3. Click NEXT to install USB2.0 driver and Click YES then system will automatically restart.

NOTE: The path of the file
For Windows 2000\XP
X:\driver\via\CX700\USB20\setup.exe



5-5 HOW TO DISABLE ON-BOARD SOUND

Enter BIOS SETUP. Choose INTEGRATED PERIPHERALS. Choose VIA ONCHIP PCI DEVICE FUNCTION. Choose Azalia HDA Controller and Disable on-board sound function by pressing PAGE DOWN KEY to Disable.

5-6 HOW TO UPDATE BIOS

In DOS Mode

STEP 1. Prepare a bootable disc. (You may make one by clicking START, clicking RUN, typing SYS A: and clicking OK)

STEP 2. Copy utility program to your bootable disc. You may copy it from DRIVER CD X:\Dirver\bios\AWDFLASH.EXE or download it from our web site.

STEP 3. Copy the latest BIOS for MV700A from our web site to your bootable disc.

STEP 4. Insert your bootable disc into A:

Start the computer and type "Awdflash A:\MV70Axxx.BIN /SN/PY/CC/R"

MV70Axxx.BIN is the file name of the latest BIOS.

It may be MV70AA1.BIN or MV70AA2.BIN, etc.

SN means don't save the current BIOS data

PY means renew the current BIOS data

CC means clear the current CMOS data

R means restart computer

STEP 5. Press ENTER and the BIOS will be updated,

Computer will restart automatically.

Appendix A: Power Consumption Test

Condition

Item	Spec
CPU	V4 - C7 1GHz
DDR RAM	DDR2 533/1GB
Operating System	Windows XPP/SP2
Test Program	3D Mark 2001SE
HDD 3.5"	Standard HDD
HDD 2.5"	Slim Type HDD
Mini PCI Card	Wireless LAN IEEE802.11g

Test Result for reference !

Hard Disk	Stand by	Start up		Operation	Shut down
		Maximum	Stable	Maximum	Maximum
Standard HDD	0.11A	2.53A	1.44A	1.99A	1.74A
Slim Type HDD	0.11A	1.59A	1.06A	1.60A	1.45A

The power consumption depends on your device choice!

Appendix B: Resolution list

640 x 480 x (256 / 16bit / 32bit)
800 x 600 x (256 / 16bit / 32bit)
1024 x 768 x (256 / 16bit / 32bit)
1280 x 1024 x (256 / 16bit / 32bit)
1600 x 1200 x (256 / 16bit / 32bit)
1920 x 1080 x (256 / 16bit / 32bit)